Appendix F

Hazards and Hazardous Materials

Site Closure Summary Report

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June 13, 2012

Mr. Thomas Rejzek
Santa Barbara County Fire Department
Fire Prevention Division
1430 Mission Drive
Solvang, California 93463
(VIA PAPER COPY)

Subject: **SITE CLOSURE SUMMARY REPORT FOR**
CHEVRON FORMER SERVICE STATION #9-4268
(FUTURE CITY OF GOLETA FIRE STATION #10)
7952 HOLLISTER AVENUE, GOLETA, CALIFORNIA
(FPD FILE #502421)

Dear Mr. Rejzek:

On behalf of Chevron Environmental Management Company (Chevron), Holguin, Fahan & Associates, Inc. (HFA) presents this site closure summary report for the above-referenced site as required by FPD correspondence dated February 21, 2012.

HFA's review of all available data pertinent to this case indicates that the site has been adequately assessed and remediation is complete. Therefore, Chevron and HFA request that the FPD proceed with the low-risk closure review.

Holguin, Fahan & Associates, Inc. trusts that this report meets the requirements of the Santa Barbara County Fire Department, Fire Prevention Division. If you have any questions or require additional information, please contact me at (805) 641-4087, or Mark_Fahan@hfa.com.

Respectfully submitted,

Mark R. Fahan, PG, REA
Vice President
Holguin, Fahan & Associates, Inc.

JRN:mrf:mgh

Enclosure

cc: Mr. Daryl Pessler, Chevron (VIA INTERNET UPLOAD)
Ms. Claudia Dato, City of Goleta (VIA EMAIL)
Mr. Alan Hanson, City of Goleta (VIA EMAIL)

SITE CLOSURE SUMMARY REPORT

CHEVRON FORMER SERVICE STATION #9-4268
(FUTURE CITY OF GOLETA FIRE STATION #10)
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
(FPD FILE #502421)

JUNE 13, 2012

Client:	Chevron Environmental Management Company 145 South State College Boulevard, Suite 400 Brea, California 92821
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TABLE OF CONTENTS

	Page
List of Acronyms	
Introduction	1
Site Description and Land Use	2
Site Geology and Hydrogeology	3
Topography and Surface Water	3
Geology	3
Hydrogeology	3
Summary of Previous Work	4
UST History	4
Site Assessment History	4
Remediation History	5
Mass of Residual Hydrocarbons	7
Sensitive Receptors	9
Landowner Identification and Notification	10
Summary of Low-Risk Closure Conditions	11
References	12

FIGURES

1	Site Location Map
2	Site Vicinity Map
3	Plot Plan
4	Plot Plan Showing Hydrocarbon Concentrations in Verification Samples
5	Post-Remediation TPH as Gasoline Concentrations in Soil
6	Geologic Cross-Section A_1–A'_1 showing Post-Remediation TPH as Gasoline Concentrations above FPD SIL
7	Geologic Cross-Section B_1–B'_1 showing Post-Remediation TPH as Gasoline Concentrations above FPD SIL
8	Post-Remediation Xylene Concentrations in Soil
9	Geologic Cross-Section A_2–A'_2 showing Post-Remediation Xylene Concentrations above FPD SIL
10	Geologic Cross-Section B_2–B'_2 showing Post-Remediation Xylene Concentrations above FPD SIL
11	Post-Remediation Naphthalene Concentrations in Soil
12	Geologic Cross-Section A_3–A'_3 showing Post-Remediation Naphthalene Concentrations above FPD SIL
13	Geologic Cross-Section B_3–B'_3 showing Post-Remediation Naphthalene Concentrations above FPD SIL
14	Post-Remediation 1,2,4-trimethylbenzene Concentrations in Soil
15	Geologic Cross-Section A_4–A'_4 showing Post-Remediation 1,2,4-trimethylbenzene Concentrations above FPD SIL
16	Geologic Cross-Section B_4–B'_4 showing Post-Remediation 1,2,4-trimethylbenzene Concentrations above FPD SIL

TABLES

1	Summary of Soil Sample Analytical Results
2	Summary of Additional Soil Sample Analytical Results
3	Comparison of Pre-Remediation and Post-Remediation Results
4	Estimate of Residual Mass of Hydrocarbons in Soil

APPENDICES

1	Agency Correspondence
2	Historical Sampling Results
3	Well Logs
4	Summary of SVE Operations
5	Case Closure Summary

LIST OF ACRONYMS

BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP	corrective action plan
COC	constituent of concern
DIPE	diisopropyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane
EPA	Environmental Protection Agency
ESL	environmental screening level
ETBE	ethyl tertiary butyl ether
fbg	feet below grade
$feet^2$	square feet
$feet^3$	cubic feet
FPD	Santa Barbara County Fire Department, Fire Prevention Division
hr	hour
ID	identification
J	value between the method detection limit and the reporting limit
kg	kilogram
lb	pound
LUFT	leaking underground fuel tank
M^3	cubic meter
mg/kg	milligrams per kilogram
MSL	mean sea level
MTBE	methyl tertiary butyl ether
N/A	not applicable
ppmv	parts per million by volume
REF	report reference
scfm	standard cubic feet per minute
SIL	site investigation level
SWRCB	California State Water Resources Control Board
SVE	soil vapor extraction
TAME	tertiary amyl methyl ether
TBA	tertiary butyl alcohol
TPH	total petroleum hydrocarbons
U.S.	United States
UST	underground storage tank
VOC	volatile organic compound

INTRODUCTION

Chevron Environmental Management Company (Chevron) contracted Holguin, Fahan & Associates, Inc. (HFA) to prepare a site closure summary report for Chevron Former Service Station #9-4268, located at 7952 Hollister Avenue, Goleta, California (see Figure 1 - Site Location Map). The purpose of this report is to summarize site conditions to evaluate low-risk closure as directed by the FPD in correspondences dated February 21, 2012 and extension approval dated March 30, 2012 (see Appendix 1 for the agency correspondence). A list of acronyms used in this report is enclosed.

The responsible party contact is Mr. Daryl Pessler, Chevron Environmental Management Company, 145 South State College Boulevard, Suite 400, Brea, California, 92821, (714) 671-3277. The consultant contact is Mr. Mark Fahan, Holguin, Fahan & Associates, Inc., 50 West Main Street, Ventura, California, 93001, (805) 641-4087. The regulatory agency contact is Mr. Thomas Rejzek, Santa Barbara County Fire Department, Fire Prevention Division, 1430 Mission Drive, Solvang, California, 93463, (805) 686-8176.

SITE DESCRIPTION AND LAND USE

Chevron Former Service Station #9-4268 is located at 7952 Hollister Avenue approximately 100 feet southeast of the intersection of Hollister Avenue and Cathedral Oaks Road in the city of Goleta, California (see Figure 1).

The subject site is a former Chevron service station that was demolished in January 1993. The site is currently a fenced, dirt lot surrounded by seasonal grasses, shrubs, and trees. The property is owned by the City of Goleta who plans to develop the property as live-in fire station #10 in the near future.

The site is bounded by railroad tracks to the north, vacant land to the east, and Hollister Avenue to the south-southwest. Sandpiper Golf Course is located further to the south-southwest, beyond Hollister Avenue (see Figure 2 - Site Vicinity Map). Elwood School (kindergarten through 6th grade) is located 0.5 mile to the southeast at 7686 Hollister Avenue, Goleta, California.

SITE GEOLOGY AND HYDROGEOLOGY

TOPOGRAPHY AND SURFACE WATER

The site is located at an elevation of 120 feet above MSL. The local topography slopes toward the south. The nearest surface water is an unnamed pond at Sandpiper Golf Course, located 800 feet southwest of the site. A seasonal creek is located 1,900 feet west of the site within Bell Canyon. The creek flows to the Pacific Ocean, which is located 2,000 feet southwest of the site (Dibblee, 1987).

GEOLOGY

The site vicinity is underlain by Quaternary alluvium with a thickness of less than 200 feet. The alluvium is derived from the erosion of the Santa Ynez Mountains to the north. The alluvium overlies unconsolidated deposits of the Santa Barbara and Monterey formations and the Vaqueros Sandstone (Dibblee, 1987). Based on site assessment activities, the site is underlain by sand and silty sand (SM/SP) from the surface to 30 fbg, clayey sand (SC) from 30 to 45 fbg, sand and silty sand (SM/SP) from 45 to 60 fbg, and clayey sand (SC) from 60 to 100 fbg, the maximum depth investigated (HFA, 2010).

HYDROGEOLOGY

The site is located near the western boundary of the Goleta Basin, within the Goleta West Basin. Groundwater in the Goleta Basin occurs in the alluvium, the fanglomerate, and the Santa Barbara Formation (DWR, 1975). Groundwater in the Goleta Basin is generally divided into a shallow zone and a deep zone (Todd, 1982). The shallow zone includes the Recent alluvium, parts of the Upper Pleistocene alluvium, and the upper part of the fanglomerate. The deep zone includes the lower part of the Upper Pleistocene alluvium and the Santa Barbara Formation. The depth to first groundwater in the site vicinity is below 100 fbg, and the groundwater flow direction in the Goleta Basin is generally toward the south.

The Goleta area primarily receives municipal water from surface waters associated with the Cachuma and State Water projects (Santa Barbara County Water Agency, 2000). Municipal groundwater from the Goleta Basin is produced on an as-needed basis by the Goleta Water District. Water is generally not produced within the Goleta West Basin due to the generally poor quality of water within the hydraulic unit (Santa Barbara County Public Works, 2001). In addition, water within the Goleta West Basin requires treatment for domestic use.

The closest well (004N/29W14G10S) is located approximately 0.25 mile northwest of the site. The well is inactive and is owned/operated by Goleta Water District.

SUMMARY OF PREVIOUS WORK

UST HISTORY

From 1968 to 1993, a gasoline service station operated at the site. In 1993, the service station was demolished and two 10,000-gallon, gasoline USTs; one 6,000-gallon, gasoline UST; one 1,000-gallon, used-oil UST; two dispenser islands; associated product and vent piping; and two hydraulic lifts were removed (see Figure 3 - Plot Plan) (Groundwater Technology, Inc., 1993).

SITE ASSESSMENT HISTORY

In 1993, a release from the former USTs and the dispenser islands was discovered. Site assessment activities included a total of 12 soil borings (Fluor Daniel GTI [GTI], 1997). Hydrocarbon-containing soil was remediated from 1994 to 1996 by SVE from seven SVE wells (GTI, 1997; SECOR International, Inc. [SECOR], 1996). The remedial system removed 10,574 pounds of TPH through the end of the fourth quarter of 1996 (SECOR, 1996). Confirmation soil samples collected in 1997 indicated hydrocarbon concentrations below the FPD SILs for all locations except B11, drilled through the former southern dispenser island location. Results for soil boring B11 showed a TPH as gasoline concentration of 810 mg/kg (GTI, 1997; Rincon Consultants, Inc. [Rincon], 2008a). All SVE wells were abandoned, and case closure was issued for the site in 1997 (FPD, 1997).

In 2007, a Phase I environmental site assessment was conducted (Rincon, 2008b). Based on the previous site usage as a service station and lack of groundwater assessment data, the Phase I recommended additional assessment. From February to April of 2008, Rincon drilled and sampled six soil borings (SB1 through SB6) to evaluate the potential for residual hydrocarbons in soil and to assess groundwater quality. Laboratory analytical results for the soil samples indicated maximum concentrations for TPH as gasoline of 20,700 mg/kg (SB1 at 20 fbg) and benzene of 11.7 mg/kg (SB1 at 15 fbg) in the vicinity of the former southern dispenser island (see Figure 3, and Appendix 2 for the historical sampling results) (Rincon, 2008a). Groundwater was not encountered to 100 fbg, the maximum depth investigated. Based on these sample results, the FPD opened a new LUFT case.

On November 20 and 21, 2008, HFA performed soil sampling at locations B-13 through B-20 using direct-push sampling techniques. Laboratory analytical results for the soil samples indicated maximum concentrations of TPH as gasoline, benzene, and MTBE of 8,200, 52, and 0.28J mg/kg, respectively (HFA, 2009a). N-butylbenzene, sec-butylbenzene, tert-butylbenzene, naphthalene, isopropylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylebenzene detections correlated to samples containing elevated TPH as gasoline and BTEX concentrations

(see Table 1 - Summary of Soil Sample Analytical Results, and Table 2 - Summary of Additional Soil Sample Analytical Results).

Based on the results of the Rincon and HFA assessments, HFA determined that TPH as gasoline, benzene, naphthalene, and other gasoline-containing VOCs were localized in the immediate vicinity of the former southern dispenser island at depths less than 30 fbg. The total volume of soil containing hydrocarbon concentrations above the FPD SILs within this area was estimated at less than 400 cubic yards (HFA, 2010).

REMEDIATION HISTORY

On July 10, 2009, HFA submitted a CAP to the FPD for remedial excavation using a patterned auger drilling technology (HFA, 2009b). The CAP was approved by the FPD in correspondence dated August 14, 2009. HFA submitted a Land Use Permit to the City of Goleta on September 9, 2009, for implementation of the approved CAP. In correspondence dated February 24, 2010, the City of Goleta notified Chevron that due to the location of the site within the Coastal Zone, submittal and approval of a Development Plan from the City of Goleta, and a Coastal Development Permit from the California Coastal Commission would be required prior to project implementation. As a result of these additional project requirements, all stakeholders agreed that other potentially feasible corrective actions should be evaluated.

On May 3, 2010, HFA submitted a revised CAP to the FPD for remediation using SVE (HFA, 2010). The CAP was approved by the FPD in correspondence dated May 11, 2010.

In August 2010, HFA installed a trailer-mounted, SVE system at the site. The SVE system uses a catalytic oxidizer, and two 300-scfm, rotary-claw, high-vacuum blowers to remove and destroy extracted VOCs. The SVE system is connected to four dual-nested SVE wells installed in the source area (see Figure 3). The wells are 25 to 30 feet deep and are dual-completed with 2-inch-diameter casing, staggered screen intervals, and short screen lengths to allow flexible and targeted extraction of VOCs (see Appendix 3 for the well logs).

HFA began operation of the SVE system on August 24, 2010, and operated the system for 3,693.8 hours through shutdown on April 22, 2011. During this time period, the SVE system removed 3,482 pounds of hydrocarbons, and influent vapor concentrations (based upon laboratory analysis) stabilized at less than 100 ppmv during the last 3 months of operation. Based upon a review of the monitoring data through March 2011, the SVE system mass removal rate has reached the point of asymptotic reduction. On March 17, 2011, HFA notified the FPD of its plans to initiate rebound testing.

On March 21, 2011, HFA shutdown the SVE system for rebound evaluation. The instantaneous SVE mass removal rate (based upon laboratory analysis of TPH as gasoline) for the March 2011 monitoring events ranged from 0.05 to 0.13 lb/hr extracted. The SVE system was left off for 2 weeks and restarted on April 4, 2011. The SVE system operated until April 22, 2011, when it was again shutdown. The instantaneous SVE mass removal rate (based upon laboratory analysis of TPH as gasoline) for samples collected during the April 2011 SVE system monitoring events ranged from 0.10 to 0.12 lb/hr extracted (see Appendix 4 for a summary of SVE operations). Benzene, which is the primary COC at the site, was not detected in any rebound sample, and benzene has not been detected in any vapor sample collected since October 4, 2010 (HFA, 2011a).

Based on similar mass removal rates prior to and after the rebound period, SVE system operations have reached their limit of effectiveness, and continued operations would not remove substantial additional mass from the subsurface. On June 29, 2011, the FPD agreed that the SVE system had removed over 90 percent of the initial mass of hydrocarbons from the soil and concurred that further corrective action was not warranted.

On July 22, 2011, HFA advanced two confirmation soil borings (B-21 and B-22) to 30 fbg using a direct-push rig. The locations and depths of the soil borings were established so that they would penetrate the previously detected hydrocarbon-containing soil in the vicinity of soil borings SB1 and B-18. Laboratory analytical results indicated that five soil samples between depths of 10 and 20 fbg contained TPH as gasoline concentrations above the FPD SIL of 200 mg/kg (see Figure 4 - Plot Plan Showing Hydrocarbon Concentrations In Verification Samples). The maximum residual TPH as gasoline concentration was 2,800 mg/kg (B-21 at 20 fbg). Benzene and MTBE were not detected above the laboratory reporting limit (see Table 1). Recalcitrant hydrocarbon compounds naphthalene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and n-butylbenzene were also detected at concentrations above the FPD SILs (see Table 2). These detections were present in the samples containing residual TPH as gasoline concentrations (see Figure 4, Table 1, and Table 2) (HFA, 2011b).

The results of verification soil samples demonstrate that SVE activities have reduced the VOCs to asymptotic levels. A comparison of pre-remediation and post-remediation hydrocarbon concentrations indicated post-remediation TPH as gasoline, benzene, and naphthalene concentrations had a one to three orders of magnitude reduction at most sample depths (see Table 3 - Comparison of Pre-Remediation and Post-Remediation Results).

MASS OF RESIDUAL HYDROCARBONS

To calculate the mass of residual hydrocarbons in soil, HFA plotted and contoured soil samples with COCs at concentrations above the FPD SIL and constructed cross-sections showing the pre-remediation and post-remediation distribution of COCs. The lateral and vertical distributions of residual hydrocarbons were determined using the soil data from the confirmation soil borings. The limits of the residual hydrocarbons were estimated based on the extent measured in other directions, and/or inferred from the extent measured in other areas of the site. Using the estimated area and thickness, a volume of impacted soil was determined for each constituent above the FPD SIL.

The post-remediation COCs were determined to be TPH as gasoline, total xylenes (further referenced as xylene), and recalcitrant VOCs, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Because benzene was not detected in post-remediation soil samples, HFA considered the COC to be de minimus and the mass and volume were not calculated. Additionally, because toluene, ethylbenzene, and n-butylbenzene were detected above the FPD SIL in only one sample (at 20 fbg for B-21), and n-propylbenzene was detected marginally above the FPD SIL in only one additional sample (at 20 fbg for B-22) these four compounds were also considered to be de minimus and were excluded from the calculations (see Table 1 and Table 2).

TPH as gasoline concentrations in excess of the FPD SIL of 200 mg/kg were measured in samples from verification soil boring B-21 at 15 and 20 fbg, and from verification soil boring B-22 at 10, 15, and 20 fbg (see Figure 5 - Post-Remediation TPH as Gasoline Concentrations in Soil, Figure 6 - Geologic Cross-Section A_1–A'_1 showing TPH as Gasoline Concentrations above FPD SIL, and Figure 7 - Geologic Cross-Section B_1–B'_1 showing TPH as Gasoline Concentrations above FPD SIL).

Xylene concentrations in excess of the FPD SIL of 175 mg/kg were measured in samples from verification soil boring B-21 at 20 fbg, and from verification soil boring B-22 at 10 and 20 fbg (see Figure 8 - Post-Remediation Xylene Concentrations in Soil, Figure 9 - Geologic Cross-Section A_2–A'_2 showing Xylene Concentrations above FPD SIL, and Figure 10 - Geologic Cross-Section B_2–B'_2 showing Xylene Concentrations above FPD SIL).

Naphthalene concentrations in excess of the FPD SIL of 1.7 mg/kg were measured in samples from verification soil boring B-21 at 15 and 20 fbg and also from verification soil boring B-22 at 10 and 20 fbg (see Figure 11 - Post-Remediation Naphthalene Concentrations in Soil, Figure 12 - Geologic Cross-Section A_3–A'_3 showing Naphthalene Concentrations above FPD SIL,

and Figure 13 - Geologic Cross-Section B_3–B'_3 showing Naphthalene Concentrations above FPD SIL).

Concentrations of 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene above the FPD SILs were generally found in the same samples as the other COCs. The mass and volume of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were based upon the contours shown in Figures 14 through 16 (see Figure 14 - Post-Remediation 1,2,4-trimethylbenzene Concentrations in Soil, Figure 15 - Geologic Cross-Section A_4–A'_4 showing 1,2,4-trimethylbenzene Concentrations above FPD SIL, and Figure 16 - Geologic Cross-Section B_4–B'_4 showing 1,2,4-trimethylbenzene Concentrations above FPD SIL).

Calculations for the residual mass and volume of COCs are shown in Table 4 - Estimate of Residual Mass of Hydrocarbons in Soil, and are summarized below.

MASS AND VOLUME ESTIMATES OF RESIDUAL HYDROCARBONS IN SOIL

COC	MASS (kg)	VOLUME (m^3)*
TPH as Gasoline	110.6	76
Xylene	11.6	13
Naphthalene	5.4	51
1,2,4-trimethylbenzene	15.6	18
1,3,5-trimethylbenzene	5.1	18

*Volume of soil containing COC.

SENSITIVE RECEPTORS

HFA performed a sensitive receptor survey based upon readily available public records, site and vicinity inspections, and site assessment results.

Beneficial Groundwater Usage: The Goleta area primarily receives municipal water from surface waters associated with the Cachuma and State Water projects (Santa Barbara County Water Agency, 2000). Municipal groundwater from the Goleta Basin is produced on an as-needed basis by the Goleta Water District. The groundwater is generally not used due to its generally poor quality, and because is requires treatment for domestic use (Santa Barbara County Public Works, 2001).

Nearest well: The closest well (004N/29W14G10S) is located approximately 0.25 mile northwest of the site. The well is inactive and is owned/operated by Goleta Water District.

Nearest surface water body: The nearest body of surface water is the Pacific Ocean, located approximately 2,000 feet south of the site.

Subsurface Features: Only standard utilities such as gas, electricity, cable, telephone, and sewer are located in the immediate site vicinity. These utilities are generally within 5 feet of the surface and would not normally provide conduits for the subsurface migration of hydrocarbons. No unusual subsurface features were noted that might act as subsurface conduits.

Nearest school: Elwood School is located at 7686 Hollister Avenue, Goleta, California, 93117, approximately 2,500 feet east of the site.

Nearest Childcare Facility: No childcare facility has been identified within 1 mile of the site.

Eldercare Facility: No eldercare facility has been identified within 1 mile of the site.

Hospital: Goleta Valley Cottage Hospital is located at 351 South Patterson Avenue, Goleta, California, 93111, approximately 6 miles east of the site.

LANDOWNER IDENTIFICATION AND NOTIFICATION

In accordance with California Health and Safety Code Chapter 6.7 (Section 25297.15), all current fee titleholders for the subject site or sites impacted by releases from USTs must be notified prior to considering case closure. The fee titleholder for the site impacted by the release is provided below.

PROPERTY ADDRESS	PROPERTY DESCRIPTION	ASSESSOR PARCEL NUMBER	OWNER ADDRESS
7952 Hollister Avenue, Goleta, California, 93117	Chevron Former Service Station #9-4268 Vacant, dirt lot	079-21A-048	City of Goleta 130 Cremona Drive, Suite B Goleta, California 93117 Attn: Claudia Dato

This correspondence will serve as notice to the above-referenced landowner that the FPD is reviewing the LUFT case for low-risk case closure.

SUMMARY OF LOW-RISK CLOSURE CONDITIONS

Applicable site conditions consistent with "low-risk" closure are summarized below.

- The hydrocarbons were remediated to the extent practicable and asymptotic conditions have been achieved using SVE methods. Additional mass removal is not feasible or warranted. A total of 3,482 pounds of hydrocarbons has been removed.

- A relatively small mass and volume of residual COCs are present in soil between depths of 10 to 20 fbg.

- The majority of the residual hydrocarbons are composed of nonvolatile components of TPH as gasoline, total xylenes, and recalcitrant hydrocarbons naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. Natural attenuation processes are the best available approach to further reduce concentrations of these recalcitrant hydrocarbons.

- Benzene was not detected in post-remediation soil samples.

- Groundwater has not been impacted and residual hydrocarbon concentrations in soil will not result in groundwater quality less than that prescribed in the Basin Plan.

Review of all available data pertinent to this case indicates that the site has been adequately assessed and that the residual hydrocarbons in soil do not pose a significant threat to human health, to beneficial or potentially beneficial groundwater, or to the environment. As such, the recommended case closure is consistent with closure of similar low-risk petroleum hydrocarbon cases as described by SWRCB Resolution #2009-0042 (SWRCB, 2009).

Based upon the site conditions presented herein, additional active remediation processes and/or continued long-term monitoring would not significantly provide any additional environmental benefit. As such, Chevron and HFA respectfully request that the FPD review this site for "low-risk" closure (see Appendix 5 for the case closure summary).

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FIGURES

EXPLANATION

0 0.5 1 MILE

0 1,000 2,000 3,000 4,000 5,000 FEET

0 0.5 1 KILOMETER

BASE MAP FROM TOPO! ©2000 NATIONAL GEOGRAPHIC HOLDINGS

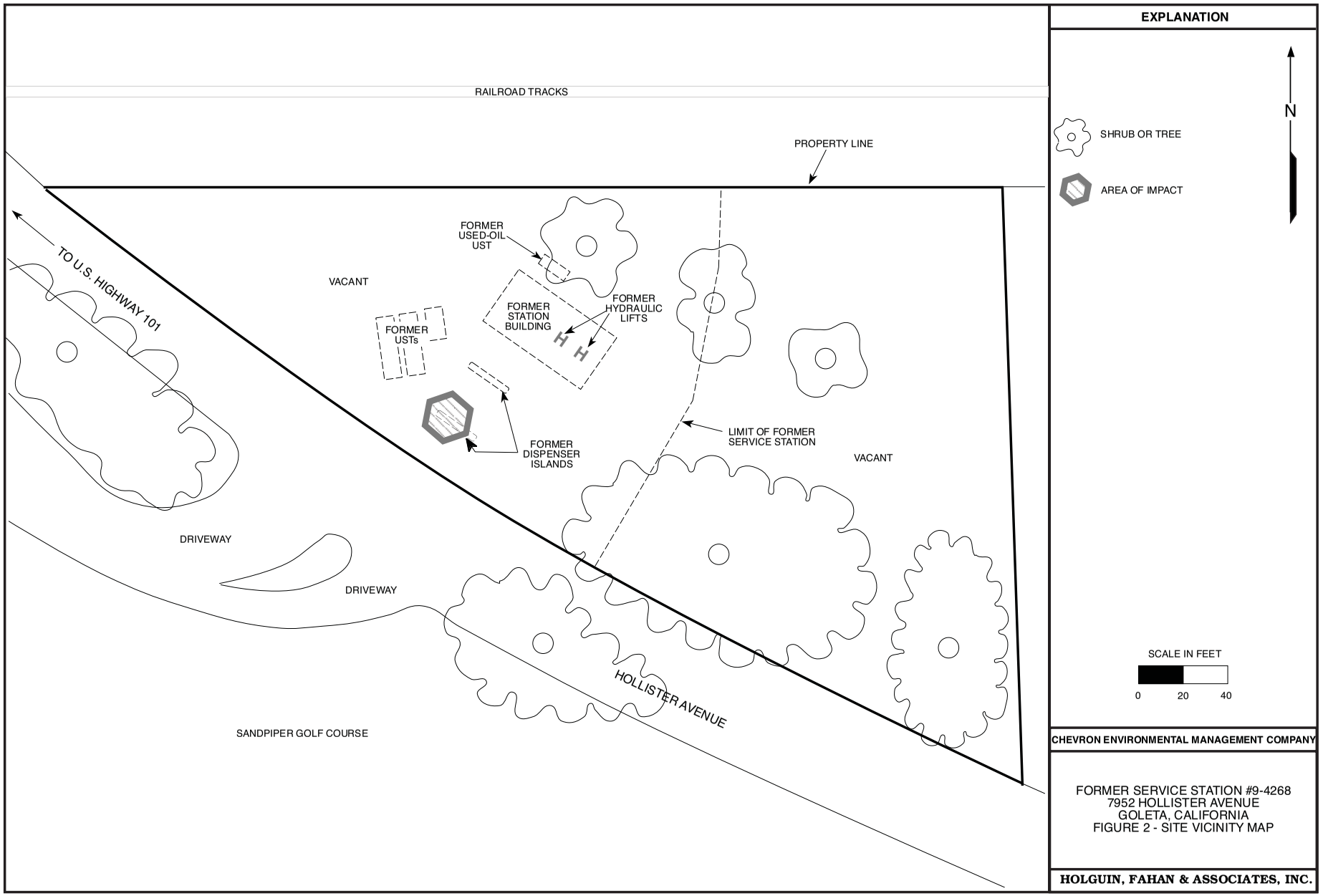
N

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

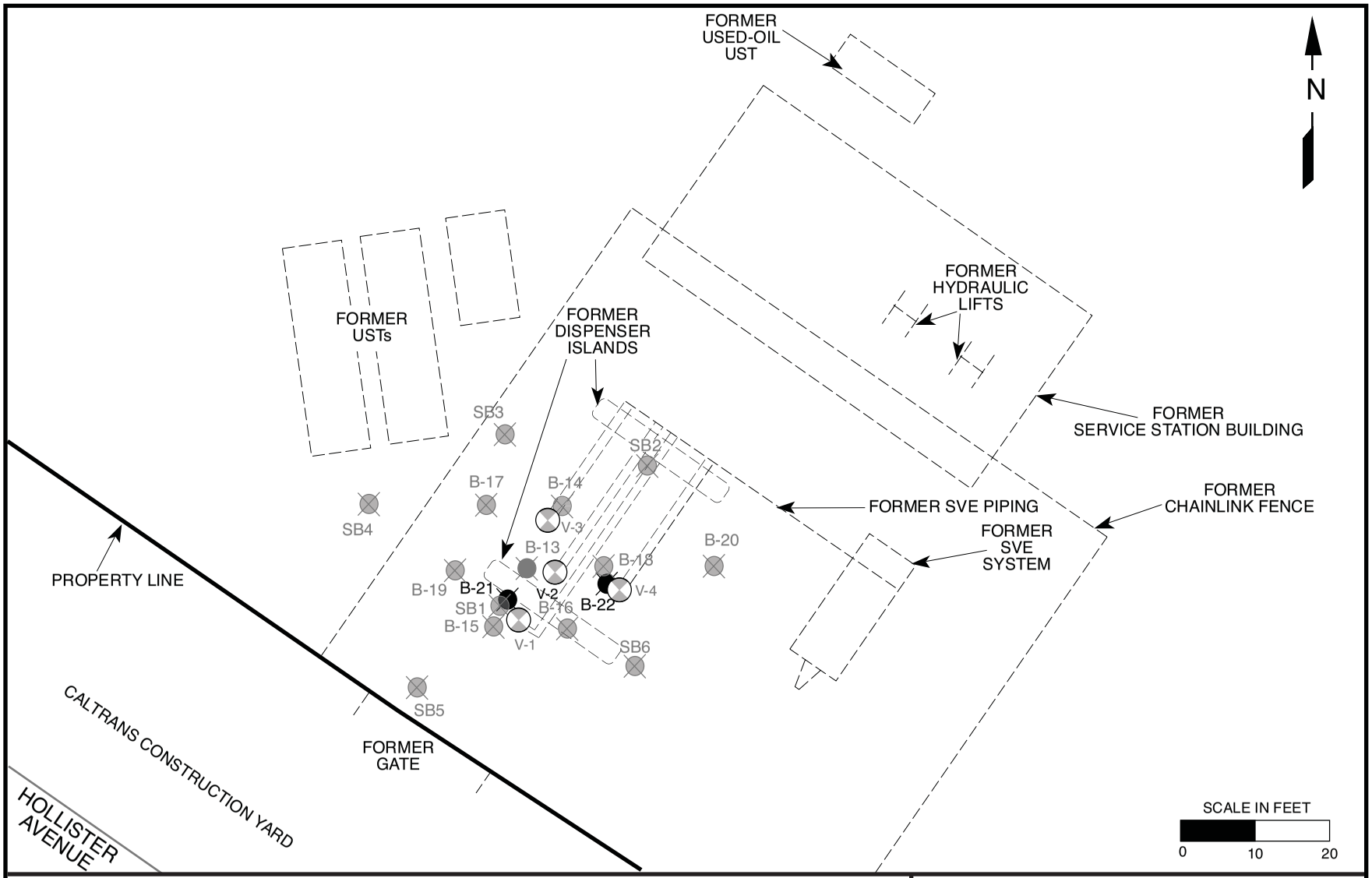
FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 1 - SITE LOCATION MAP

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: JANUARY 5, 2011:MGH



REVISION DATE: JULY 25, 2011:MGH



EXPLANATION

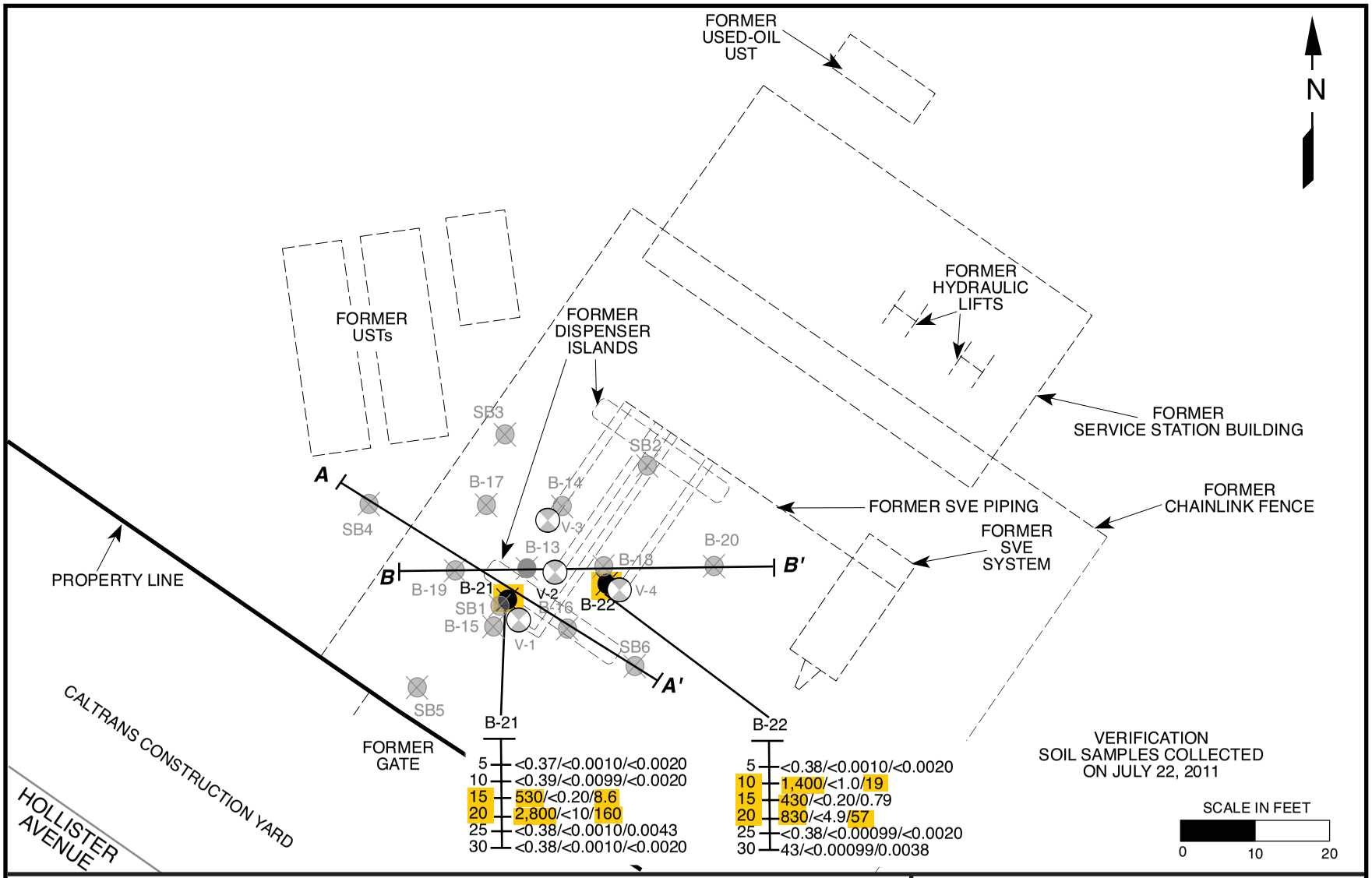
- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 3 - PLOT PLAN

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: NOVEMBER 11, 2011:MGH



EXPLANATION

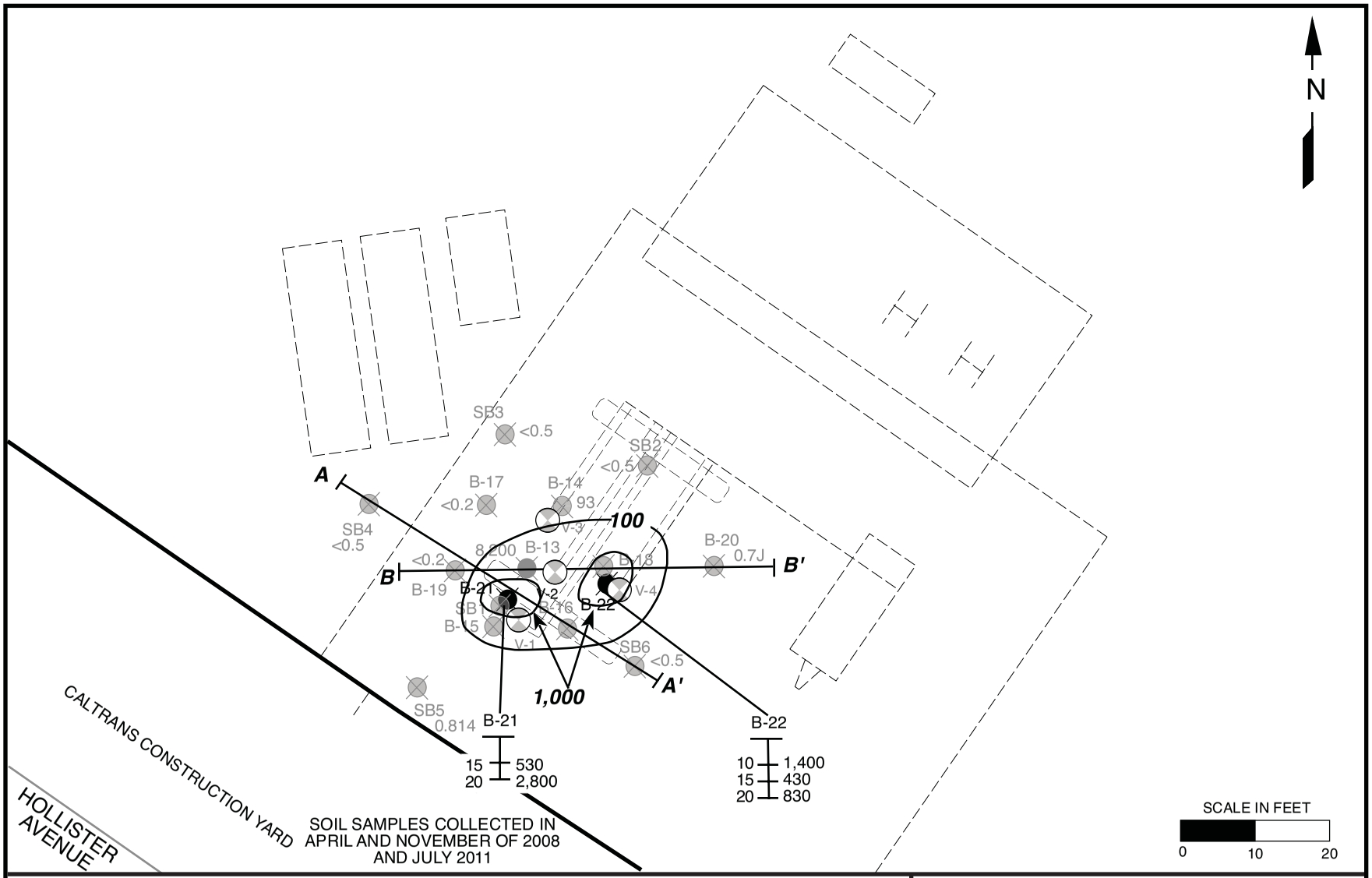
- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING
- LINE OF CROSS SECTION
- CONCENTRATION ABOVE FPD SITE INVESTIGATION LEVEL
- # DEPTH OF SOIL SAMPLE (fbg)
- #/#/# TPH AS GASOLINE/BENZENE/NAPHTHALENE CONCENTRATIONS IN SOIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 4 - PLOT PLAN SHOWING HYDROCARBON CONCENTRATIONS IN VERIFICATION SAMPLES

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 14, 2011:MGH



EXPLANATION

- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING
- LINE OF CROSS SECTION
- 100 — CONTOUR OF TPH AS GASOLINE CONCENTRATIONS ABOVE FPD SIL (mg/kg)
- # + # — DEPTH OF VERIFICATION SOIL SAMPLE (fbg) AND TPH AS GASOLINE CONCENTRATION ABOVE FPD SIL (mg/kg)
- # — PRE-REMEDIATION, CONTOUR-DEFINING RESULT (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

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GOLETA, CALIFORNIA
FIGURE 5 - POST-REMEDIATION TPH AS GASOLINE CONCENTRATIONS IN SOIL

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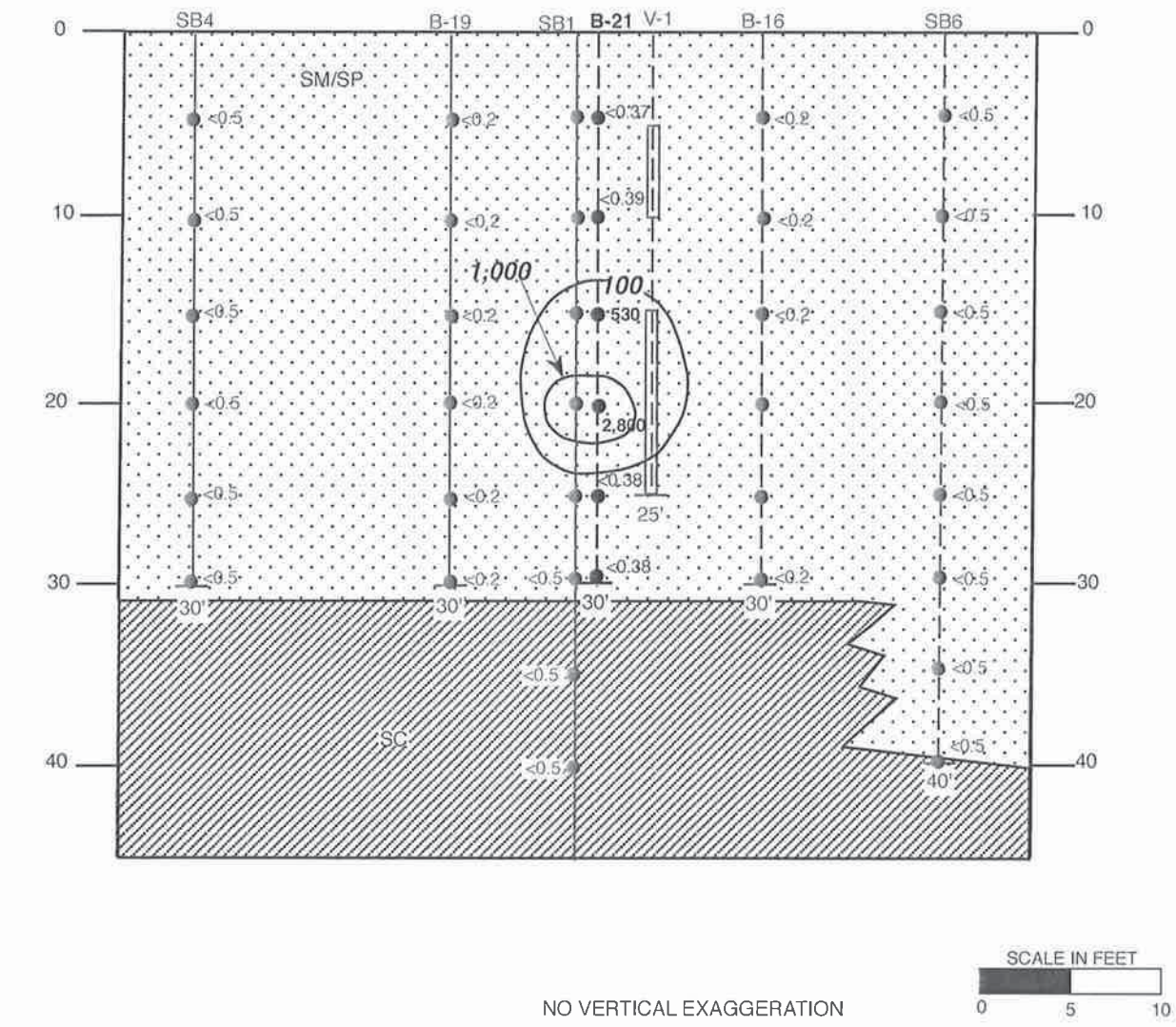
REVISION DATE: OCTOBER 14, 2011:MGH



EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

SAND (SM/SP)

CLAYEY SAND (SC)

← TPH AS GASOLINE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION

← SVE WELL SCREEN INTERVAL

100 CONTOUR OF POST-REMEDIATION TPH AS GASOLINE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

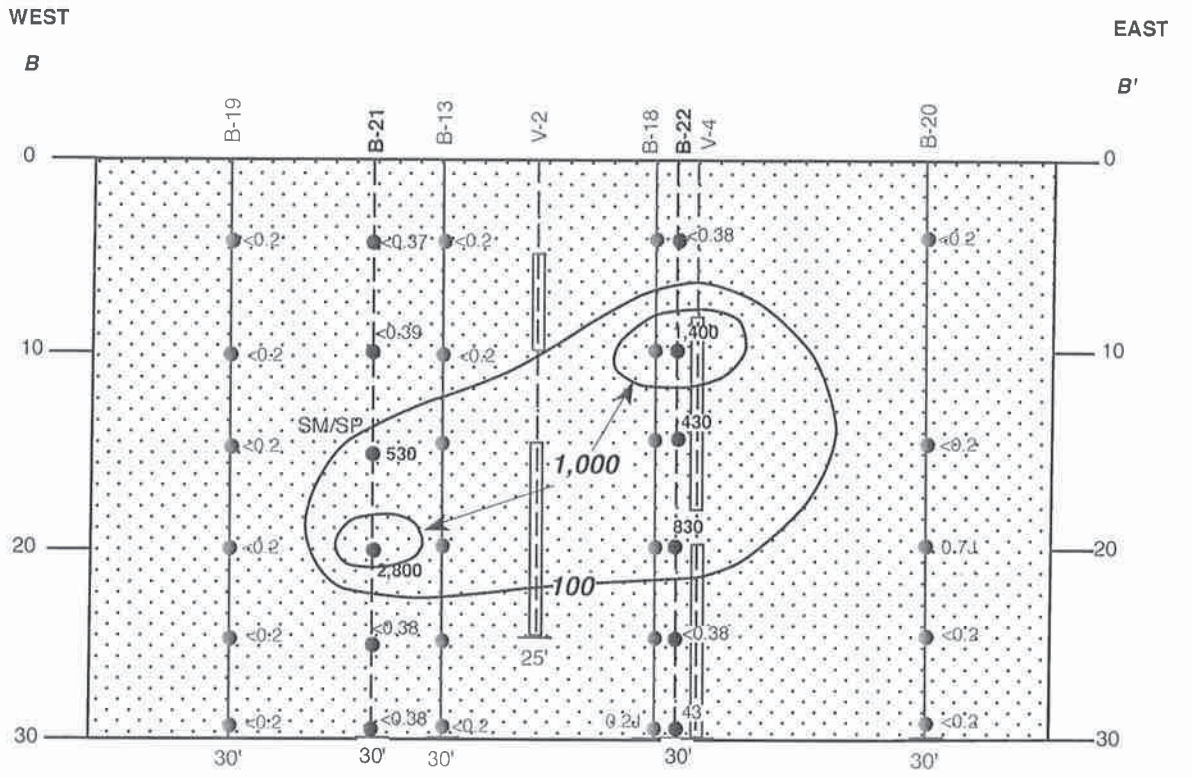
TD = X' ← TOTAL BORING DEPTH

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 6 - GEOLOGIC CROSS-SECTION
A–A'
1" = 1'
SHOWING POST-REMEDIATION TPH AS GASOLINE CONCENTRATIONS ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH



SCALE IN FEET
0 5 10

NO VERTICAL EXAGGERATION

EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

← TPH AS GASOLINE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION

← PERFORATED WELL INTERVAL

← DEPTH OF WELL

TD = X' ← TOTAL BORING DEPTH

SAND (SM/SP)

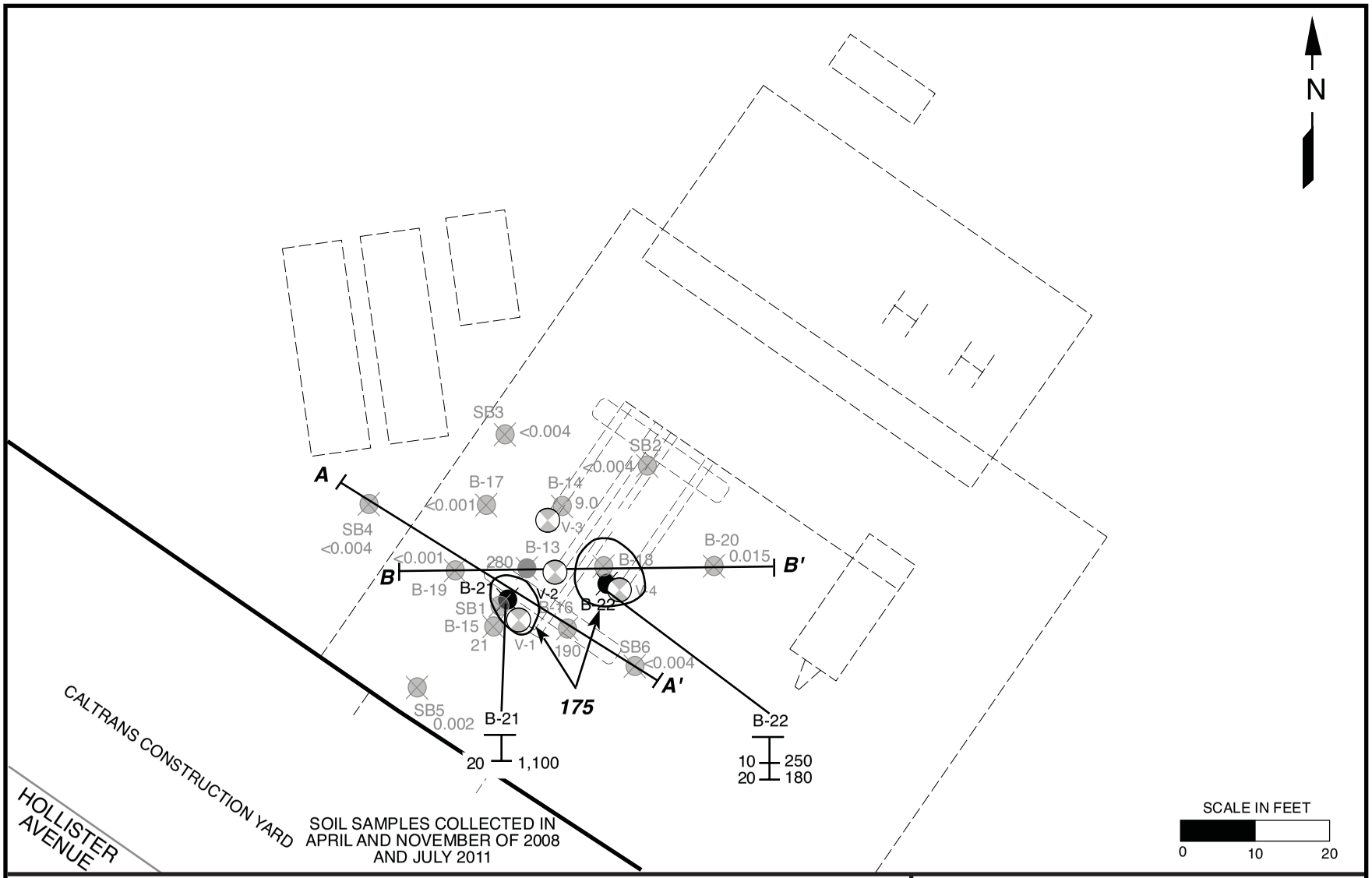
100 CONTOUR OF POST-REMEDIATION TPH AS GASOLINE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 7 - GEOLOGIC CROSS-SECTION
B_1-B'_1
SHOWING POST-REMEDIATION TPH AS GASOLINE CONCENTRATIONS ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH



EXPLANATION

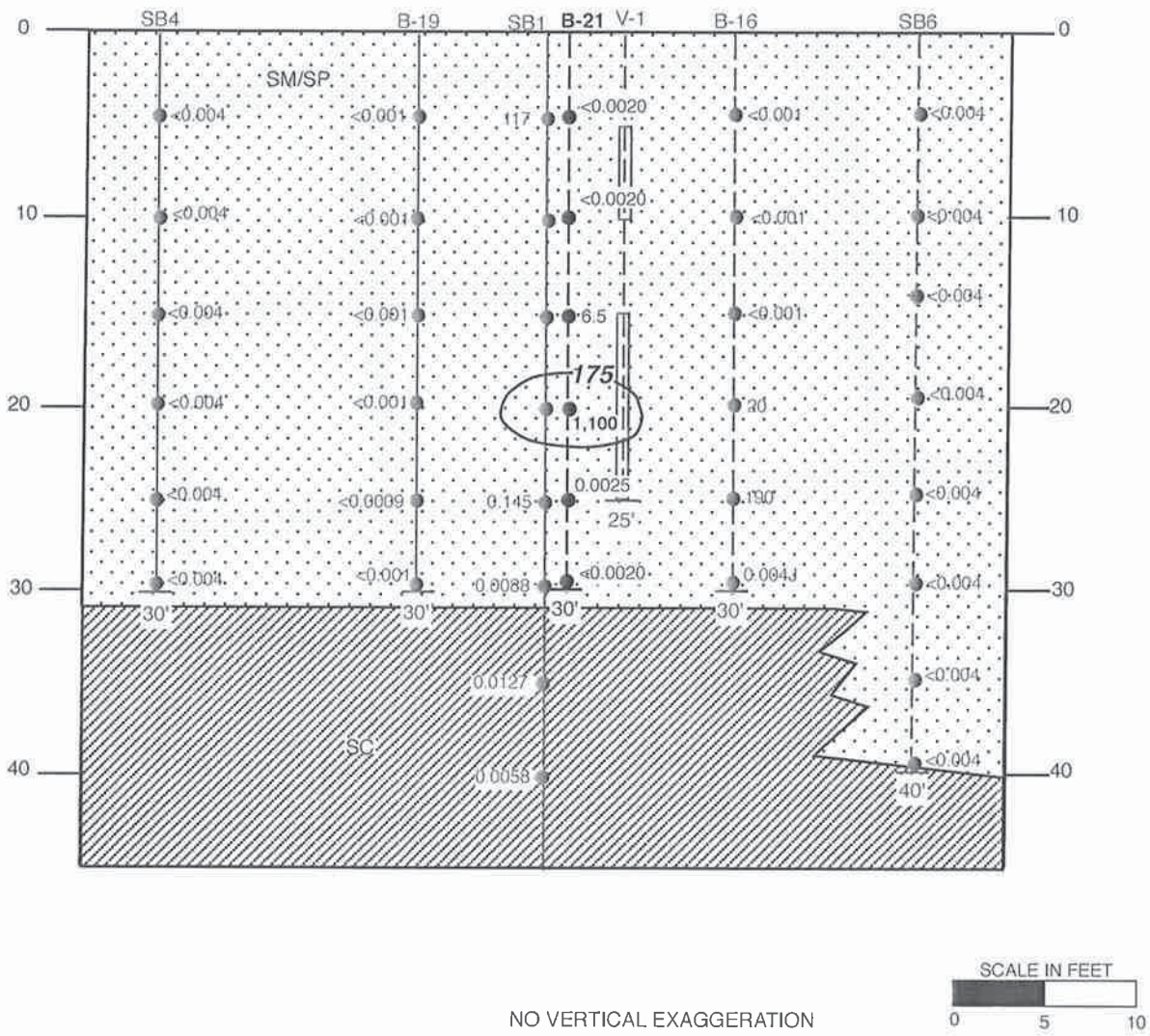
- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING
- LINE OF CROSS SECTION
- 175 — CONTOUR OF XYLENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)
- # | # — DEPTH OF SOIL SAMPLE (fbg) AND XYLENE CONCENTRATION ABOVE FPD SIL (mg/kg)
- # — PRE-REMEDIATION, CONTOUR-DEFINING RESULT (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 8 - POST-REMEDIATION XYLENE CONCENTRATIONS IN SOIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 14, 2011:MGH



EXPLANATION

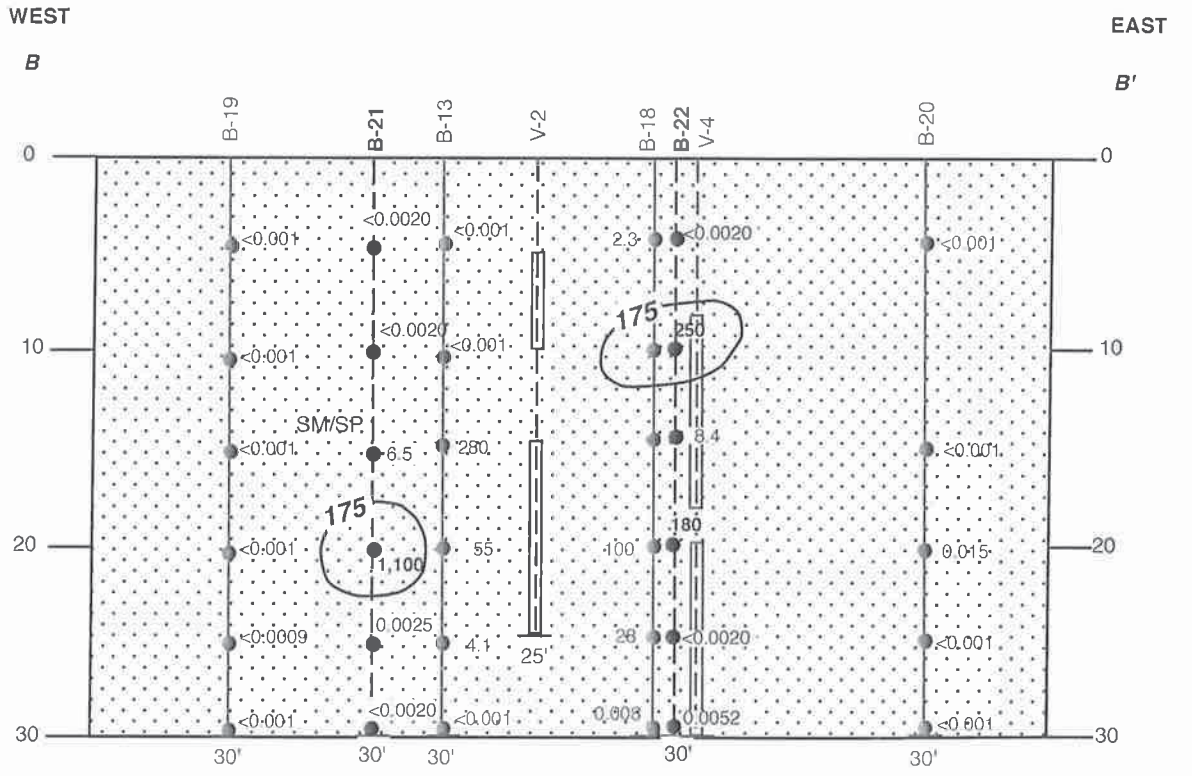
- B-19 ← BORING/WELL DESIGNATION
- ← BORING/WELL (DASHED WHERE PROJECTED)
- # ← XYLENE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION
- ← SVE WELL SCREEN INTERVAL
- TD = X' ← TOTAL BORING DEPTH
- SAND (SM/SP)
- CLAYEY SAND (SC)
- 175 CONTOUR OF POST-REMEDIATION XYLENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 9 - GEOLOGIC CROSS-SECTION
A_2–A'_2
SHOWING POST-REMEDIATION
XYLENE CONCENTRATIONS ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH



SCALE IN FEET
0 5 10

NO VERTICAL EXAGGERATION

EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

← XYLENE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION

← PERFORATED WELL INTERVAL

← DEPTH OF WELL

TD = X' ← TOTAL BORING DEPTH

SAND (SM/SP)

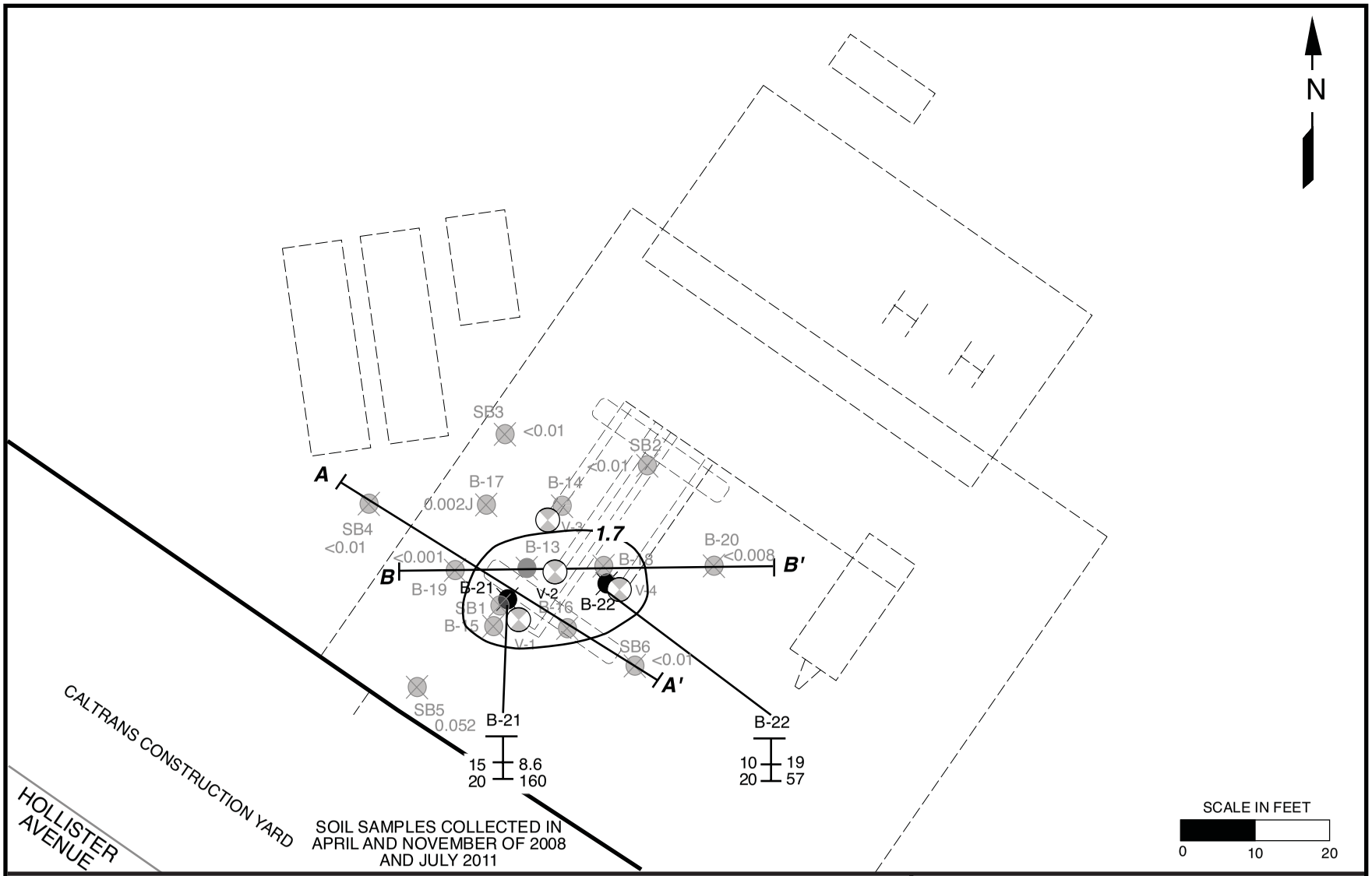
175 CONTOUR OF POST-REMEDIATION XYLENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 10-GEOLOGIC CROSS-SECTION B-B'
SHOWING POST-REMEDIATION XYLENE CONCENTRATIONS ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH



EXPLANATION

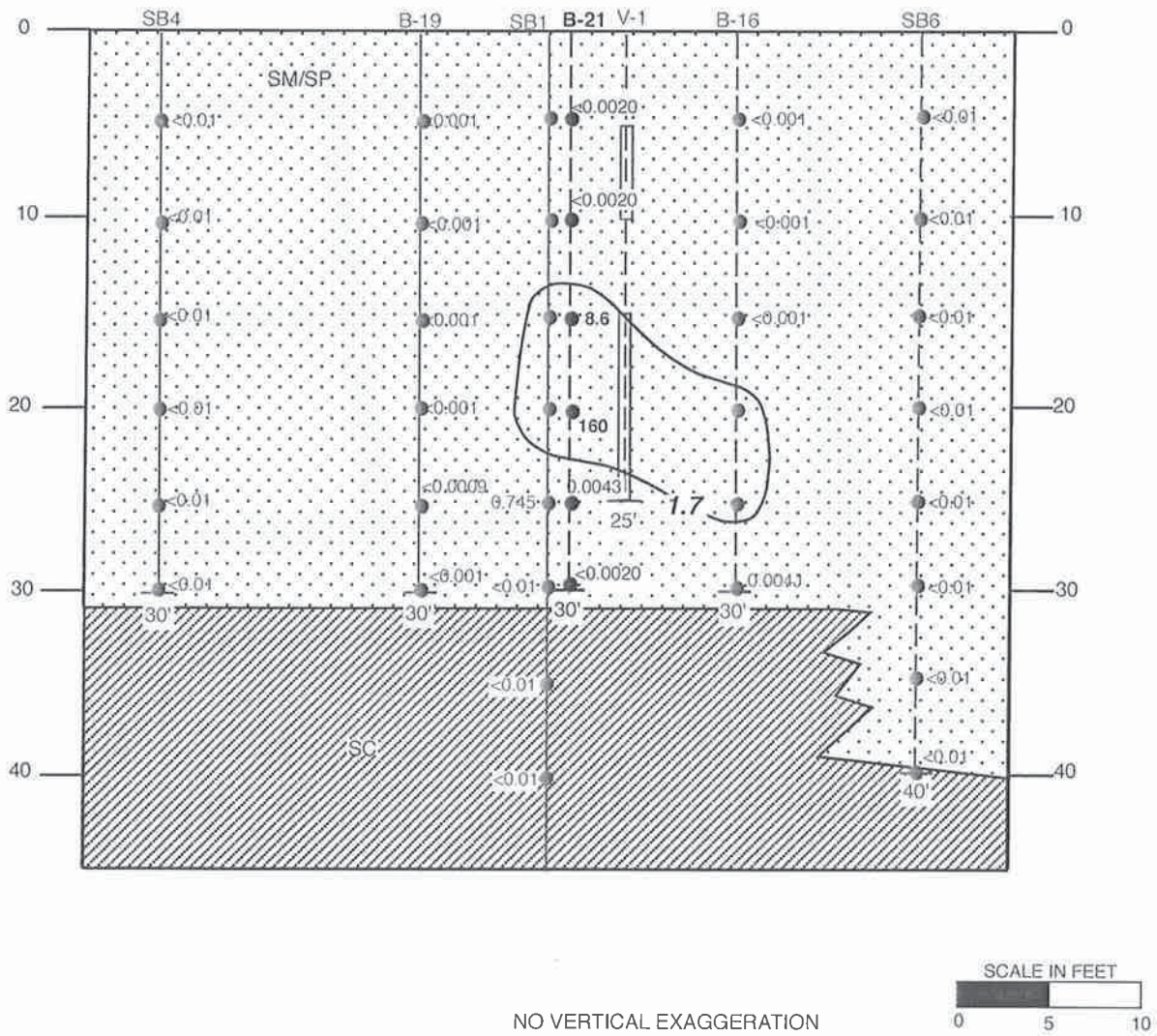
- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING
- LINE OF CROSS SECTION
- 1.7 — CONTOUR OF NAPHTHALENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)
- # / # — DEPTH OF SOIL SAMPLE (fbg) AND NAPHTHALENE CONCENTRATION ABOVE FPD SIL (mg/kg)
- # — PRE-REMEDIATION, CONTOUR-DEFINING RESULT (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 11 - POST-REMEDIATION NAPHTHALENE CONCENTRATIONS IN SOIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 14, 2011:MGH



SCALE IN FEET
0 5 10

NO VERTICAL EXAGGERATION

EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

← NAPHTHALENE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION

← SVE WELL SCREEN INTERVAL

TD = X' ← TOTAL BORING DEPTH

SAND (SM/SP)

CLAYEY SAND (SC)

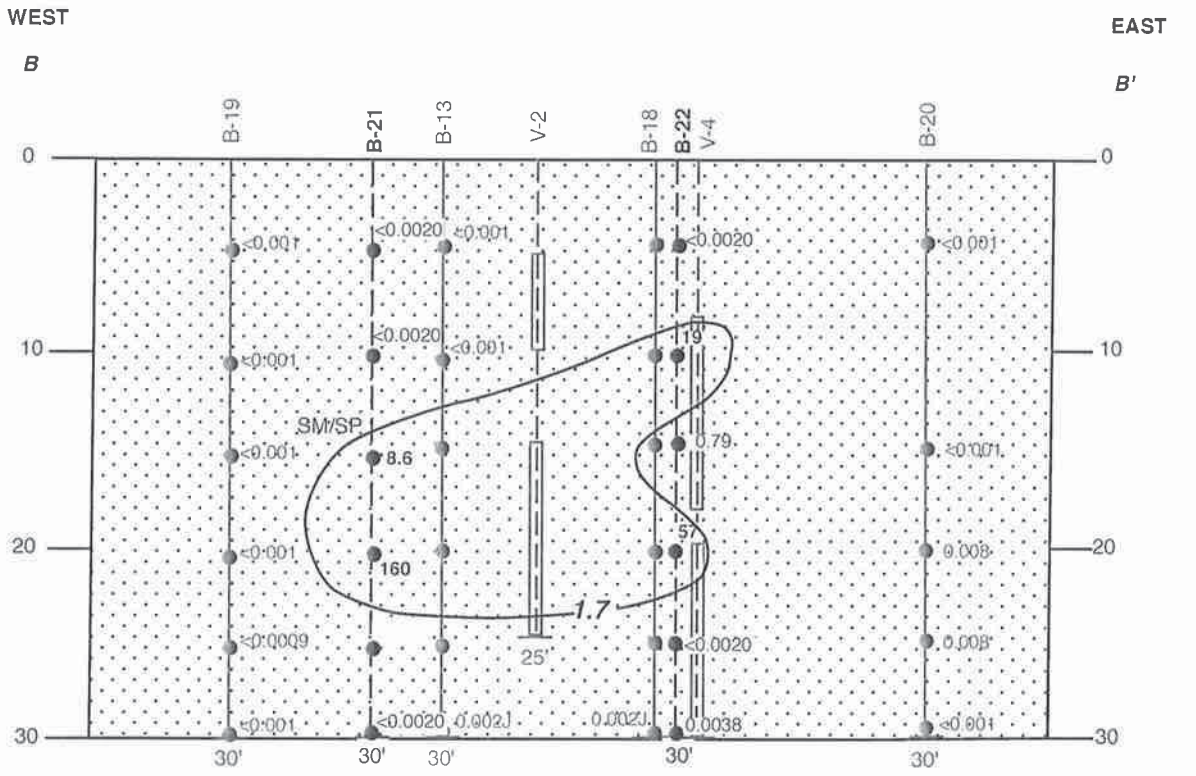
1.7 CONTOUR OF POST-REMEDIATION NAPHTHALENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 12 - GEOLOGIC CROSS-SECTION
A–A'
3 3
SHOWING POST-REMEDIATION
NAPHTHALENE CONCENTRATIONS ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH

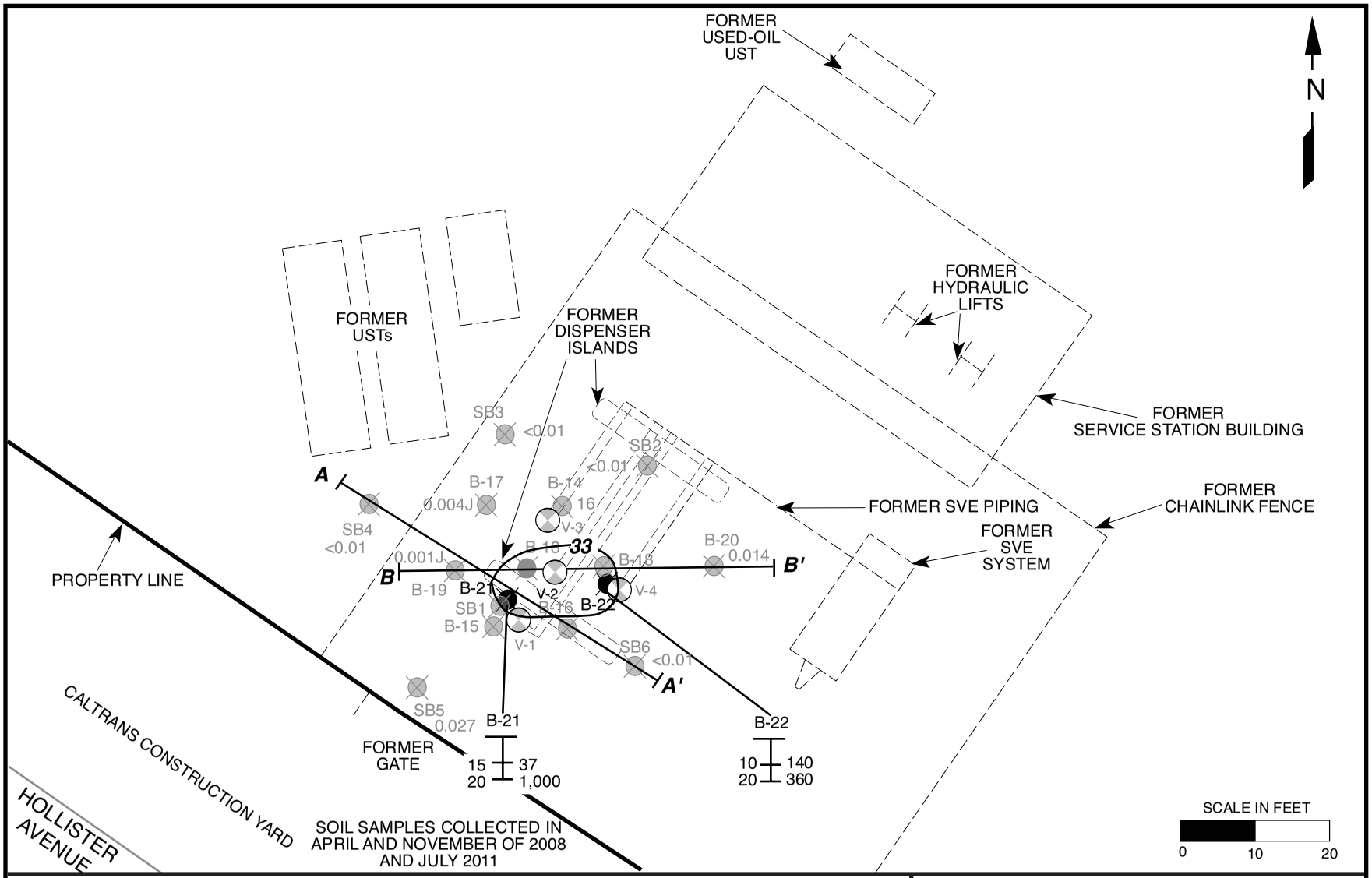


NO VERTICAL EXAGGERATION

SCALE IN FEET
0 5 10

EXPLANATION	CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
B-19 ← BORING/WELL DESIGNATION ← BORING/WELL (DASHED WHERE PROJECTED) # ← NAPHTHALENE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION ← PERFORATED WELL INTERVAL ← DEPTH OF WELL TD = X' ← TOTAL BORING DEPTH SAND (SM/SP) 1.7 CONTOUR OF POST-REMEDIATION NAPHTHALENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)	FORMER SERVICE STATION #9-4268 7952 HOLLISTER AVENUE GOLETA, CALIFORNIA FIGURE 13 - GEOLOGIC CROSS-SECTION B_3-B'_3 SHOWING POST-REMEDIATION NAPHTHALENE CONCENTRATIONS ABOVE FPD SIL **HOLGUIN, FAHAN & ASSOCIATES, INC.**

REVISION DATE: OCTOBER 5, 2011:MGH



EXPLANATION

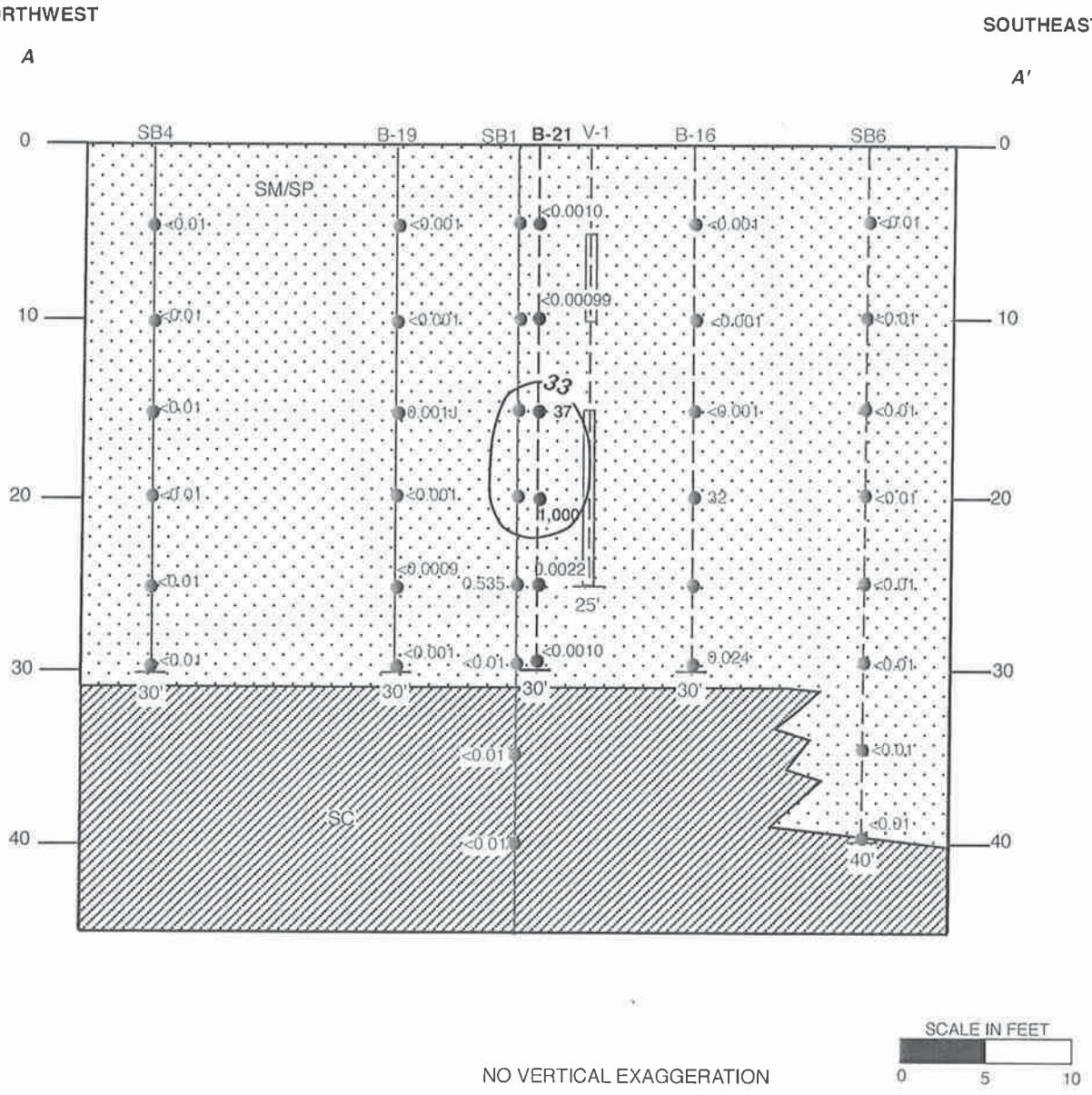
- PRE-REMEDIATION SOIL BORING
- SOIL VAPOR EXTRACTION WELL
- VERIFICATION BORING
- LINE OF CROSS SECTION
- 33 — CONTOUR OF 1,2,4-TRIMETHYLBENZENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)
- # + # — DEPTH OF SOIL SAMPLE (fbg) AND 1,2,4-TRIMETHYLBENZENE CONCENTRATION ABOVE FPD SIL (mg/kg)
- # — PRE-REMEDIATION, CONTOUR-DEFINING RESULT (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 14 - POST-REMEDIATION
1,2,4-TRIMETHYLBENZENE CONCENTRATIONS IN SOIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: NOVEMBER 11, 2011:MGH



SCALE IN FEET
0 5 10

NO VERTICAL EXAGGERATION

EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

\# ← 1,2,4-TRIMETHYLBENZENE CONCENTRATION IN SOIL SAMPLE (mg/kg)
GRAY = PRE-REMEDIATION,
BLACK = POST-REMEDIATION

← SVE WELL SCREEN INTERVAL

TD = X' ← TOTAL BORING DEPTH

SAND (SM/SP)

CLAYEY SAND (SC)

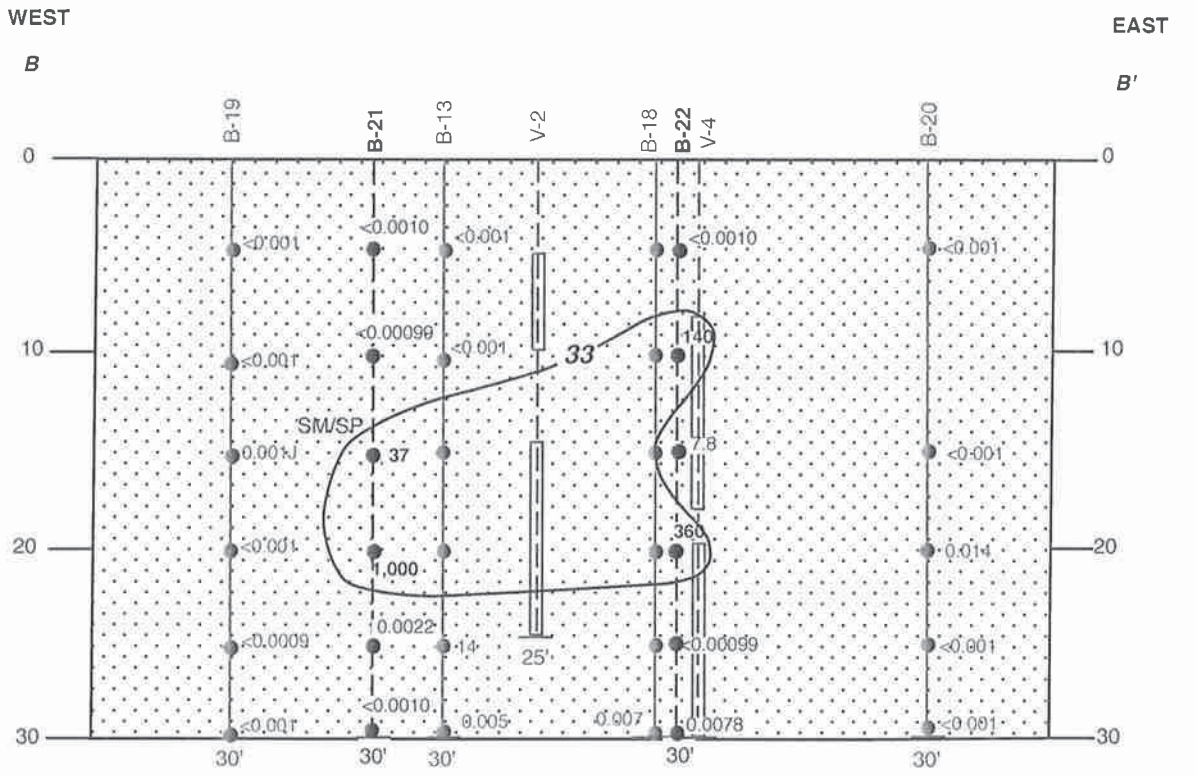
33 CONTOUR OF POST-REMEDIATION 1,2,4-TRIMETHYLBENZENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 15 - GEOLOGIC CROSS-SECTION
A_4–A'_4
SHOWING POST-REMEDIATION
1,2,4-TRIMETHYLBENZENE CONCENTRATIONS
ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH



NO VERTICAL EXAGGERATION

SCALE IN FEET
0 5 10

EXPLANATION

B-19 ← BORING/WELL DESIGNATION

← BORING/WELL (DASHED WHERE PROJECTED)

← 1,2,4-TRIMETHYLBENZENE CONCENTRATION IN SOIL SAMPLE (mg/kg) GRAY = PRE-REMEDIATION, BLACK = POST-REMEDIATION

← PERFORATED WELL INTERVAL

← DEPTH OF WELL

TD = X' ← TOTAL BORING DEPTH

SAND (SM/SP)

33 — CONTOUR OF POST-REMEDIATION 1,2,4-TRIMETHYLBENZENE CONCENTRATIONS ABOVE FPD SIL (mg/kg)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 16 - GEOLOGIC CROSS-SECTION
B–B'
4 4
SHOWING POST-REMEDIATION
1,2,4-TRIMETHYLBENZENE CONCENTRATIONS
ABOVE FPD SIL

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: OCTOBER 5, 2011:MGH

TABLES

TABLE 1.
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	REF
EPA ANALYTICAL METHOD				8015/8015B	8260B									N/A
FPD SIL/ESL				100	0.1	15	30	175	0.050	0.120	*	*	*	N/A
PRE-REMEDIATION														
B-13	11-20-08	5	B-13-S-5-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-20-08	10	B-13-S-10-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-20-08	15	B-13-S-15-081120	8,200	0.20J	24	30	280	<0.053	<2.1	<0.11	<0.11	<0.11	A
	11-20-08	20	B-13-S-20-081120	950	0.085J	5.8	6.5	55	<0.025	<0.98	<0.049	<0.049	<0.049	A
	11-20-08	25	B-13-S-25-081120	110	<0.026	0.17J	0.48	4.1	<0.026	<1.0	<0.052	<0.052	<0.052	A
	11-20-08	30	B-13-S-30-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	A
B-14	11-20-08	5	B-14-S-5-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	A
	11-20-08	10	B-14-S-10-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-20-08	15	B-14-S-15-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	A
	11-20-08	20	B-14-S-20-081120	93	<0.023	0.38	1.3	9.0	<0.023	<0.94	<0.047	<0.047	<0.047	A
	11-20-08	25	B-14-S-25-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	A
	11-20-08	30	B-14-S-30-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
B-15	11-20-08	5	B-15-S-5-081120	<2.0	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	A
	11-20-08	10	B-15-S-10-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001	<0.001	A
	11-20-08	15	B-15-S-15-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-20-08	20	B-15-S-20-081120	270	<0.023	0.95	2.5	21	<0.023	<0.91	<0.046	<0.046	<0.046	A
	11-20-08	25	B-15-S-25-081120	42	<0.025	<0.05	0.060J	0.90	<0.025	<1.0	<0.050	<0.050	<0.050	A
	11-20-08	30	B-15-S-30-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
B-16	11-20-08	5	B-16-S-5-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	10	B-16-S-10-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	15	B-16-S-15-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	20	B-16-S-20-081121	440	<0.027	0.78	2.0	20	<0.027	<1.1	<0.054	<0.054	<0.054	A
	11-21-08	25	B-16-S-25-081121	1,700	<0.047	12	22	190	<0.047	<1.9	<0.093	<0.093	<0.093	A
	11-21-08	30	B-16-S-30-081121	<0.2	<0.0005	<0.001	<0.001	0.009	<0.0005	<0.021	<0.001	<0.001	<0.001	A

TABLE 1.
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	REF
EPA ANALYTICAL METHOD				8015/8015B	8260B									N/A
FPD SIL/ESL				100	0.1	15	30	175	0.050	0.120	*	*	*	N/A
B-17	11-20-08	5	B-17-S-5-081120	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	A
	11-21-08	10	B-17-S-10-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	15	B-17-S-15-081121	<0.2	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.019	<0.0009	<0.0009	<0.0009	A
	11-21-08	20	B-17-S-20-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	A
	11-21-08	25	B-17-S-25-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	30	B-17-S-30-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
B-18	11-21-08	5	B-18-S-5-081121	85	<0.026	<0.052	<0.052	2.3	<0.026	<1.0	<0.052	<0.052	<0.052	A
	11-21-08	10	B-18-S-10-081121	5,600	51	570	160	1,100	0.28J	<9.9	<0.5	<0.5	<0.5	A
	11-21-08	15	B-18-S-15-081121	3,500	52	630	170	1,200	0.28J	<10	<0.51	<0.51	<0.51	A
	11-21-08	20	B-18-S-20-081121	500	0.39	13	11	100	<0.024	<0.96	<0.048	<0.048	<0.048	A
	11-21-08	25	B-18-S-25-081121	400	<0.026	2.7	3.3	28	<0.026	<1.0	<0.052	<0.052	<0.052	A
	11-21-08	30	B-18-S-30-081121	0.2J	<0.0005	0.002J	<0.001	0.008	<0.0005	<0.021	<0.001	<0.001	<0.001	A
B-19	11-21-08	5	B-19-S-5-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	10	B-19-S-10-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	15	B-19-S-15-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	20	B-19-S-20-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.019	<0.001	<0.001	<0.001	A
	11-21-08	25	B-19-S-25-081121	<0.2	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.018	<0.0009	<0.0009	<0.0009	A
	11-21-08	30	B-19-S-30-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.022	<0.001	<0.001	<0.001	A
B-20	11-21-08	5	B-20-S-5-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	15	B-20-S-15-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	20	B-20-S-20-081121	0.7J	<0.0005	0.004J	0.001J	0.015	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	25	B-20-S-25-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
	11-21-08	30	B-20-S-30-081121	<0.2	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001	<0.001	A
POST-REMEDIATION														
B-21	7-22-11	5	B-21-S-5-110722	<0.37	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	--	--	--	--	B
	7-22-11	10	B-21-S-10-110722	<0.39	<0.0099	<0.0099	<0.0099	<0.0020	<0.0020	--	--	--	--	B
	7-22-11	15	B-21-S-15-110722	530	<0.20	0.20	0.34	6.5	<0.50	--	--	--	--	B
	7-22-11	20	B-21-S-20-110722	2,800	<10	78	130	1,100	<25	--	--	--	--	B
	7-22-11	25	B-21-S-25-110722	<0.38	<0.0010	<0.0010	<0.0010	0.0025	<0.0020	--	--	--	--	B
	7-22-11	30	B-21-S-30-110722	<0.38	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	--	--	--	--	B

TABLE 1.
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	REF
EPA ANALYTICAL METHOD				8015/8015B	8260B									N/A
FPD SIL/ESL				100	0.1	15	30	175	0.050	0.120	*	*	*	N/A
B-22	7-22-11	5	B-22-S-5-110722	<0.38	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	--	--	--	--	B
	7-22-11	10	B-22-S-10-110722	1,400	<1.0	5.6	28	250	<2.5	--	--	--	--	B
	7-22-11	15	B-22-S-15-110722	430	<0.20	0.92	0.63	8.4	<0.49	--	--	--	--	B
	7-22-11	20	B-22-S-20-110722	830	<4.9	<4.9	19	180	<12	--	--	--	--	B
	7-22-11	25	B-22-S-25-110722	<0.38	<0.00099	<0.00099	<0.00099	<0.0020	<0.0020	--	--	--	--	B
	7-22-11	30	B-22-S-30-110722	43	<0.00099	<0.00099	<0.00099	0.0052	<0.0020	--	--	--	--	B

* = not established. <# = not detected at the reporting or detection limit indicated. -- = not analyzed. = pre-remediation.

= concentration above FPD SIL.

A = Holguin, Fahan & Associates, Inc.'s (HFA's) report dated February 18, 2009.

B = HFA's report dated December 20, 2011.

TABLE 2.
SUMMARY OF ADDITIONAL SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	EDB (mg/kg)	EDC (mg/kg)	N-BUTYLBENZENE (mg/kg)	SEC-BUTYLBENZENE (mg/kg)	TERT-BUTYLBENZENE (mg/kg)	NAPHTHALENE (mg/kg)	ISOPROPYLBENZENE (mg/kg)	N-PROPYLBENZENE (mg/kg)	1,2,4-TRIMETHYLBENZENE (mg/kg)	1,3,5-TRIMETHYLBENZENE (mg/kg)	REF
FPD SIL/ESL				0.0005	0.005	26	26	26	1.7	77	26	33	21	N/A
EPA ANALYTICAL METHOD				8260B										N/A
PRE-REMEDIATION														
B-13	11-20-08	5	B-13-S-5-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	10	B-13-S-10-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	15	B-13-S-15-081120	<0.11	<0.11	13	3.7	0.35J	20	6.1	24	230	77	A
	11-20-08	20	B-13-S-20-081120	<0.049	<0.049	6.8	1.6	<0.049	18	1.4	6.8	93	28	A
	11-20-08	25	B-13-S-25-081120	<0.052	<0.052	1.2	0.29	<0.052	3.7	0.18J	1.1	14	4.6	A
	11-20-08	30	B-13-S-30-081120	<0.001	<0.001	<0.001	<0.001	<0.001	0.002J	<0.001	<0.001	0.005	0.002J	A
B-14	11-20-08	5	B-14-S-5-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001J	<0.001	A
	11-20-08	10	B-14-S-10-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	15	B-14-S-15-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	20	B-14-S-20-081120	<0.047	<0.047	1.4	0.41	<0.047	3.0	0.39	1.7	16	5.3	A
	11-20-08	25	B-14-S-25-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	30	B-14-S-30-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
B-15	11-20-08	5	B-15-S-5-081120	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	A
	11-20-08	10	B-15-S-10-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	15	B-15-S-15-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-20-08	20	B-15-S-20-081120	<0.046	<0.046	2.8	0.65	<0.046	11	0.62	3.0	37	11	A
	11-20-08	25	B-15-S-25-081120	<0.050	<0.050	0.93	0.15J	<0.050	3.6	<0.050	0.26	6.3	2.2	A
	11-20-08	30	B-15-S-30-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
B-16	11-20-08	5	B-16-S-5-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	10	B-16-S-10-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	15	B-16-S-15-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	20	B-16-S-20-081121	<0.054	<0.054	1.8	0.5	<0.054	5.1	0.61	2.9	32	9.6	A
	11-21-08	25	B-16-S-25-081121	<0.093	<0.093	42	8.1	0.90	93	5.9	34	520	130	A
	11-21-08	30	B-16-S-30-081121	<0.001	<0.001	0.002J	<0.001	<0.001	0.004J	<0.001	0.001J	0.024	0.007	A
B-17	11-20-08	5	B-17-S-5-081120	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003J	0.001J	A
	11-21-08	10	B-17-S-10-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	15	B-17-S-15-081121	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	0.002J	<0.0009	<0.0009	0.004J	0.001J	A
	11-21-08	20	B-17-S-20-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	25	B-17-S-25-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	30	B-17-S-30-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
B-18	11-21-08	5	B-18-S-5-081121	<0.052	<0.052	0.74	<0.052	<0.052	6.4	<0.052	<0.052	38	18	A
	11-21-08	10	B-18-S-10-081121	0.95J	<0.50	19	5.9	0.83J	43	15	56	390	130	A
	11-21-08	15	B-18-S-15-081121	0.94J	<0.51	19	5.9	0.82J	41	15	57	420	130	A
	11-21-08	20	B-18-S-20-081121	0.056J	<0.048	4.2	1.3	0.20J	8.6	2.1	8.5	100	31	A
	11-21-08	25	B-18-S-25-081121	<0.052	<0.052	3.1	0.97	<0.052	5.4	0.88	5.2	62	19	A
	11-21-08	30	B-18-S-30-081121	<0.001	<0.001	<0.001	<0.001	<0.001	0.002J	<0.001	<0.001	0.007	0.002J	A
B-19	11-21-08	5	B-19-S-5-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	10	B-19-S-10-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	15	B-19-S-15-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001J	<0.001	A
	11-21-08	20	B-19-S-20-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	25	B-19-S-25-081121	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	A
	11-21-08	30	B-19-S-30-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A

TABLE 2.
SUMMARY OF ADDITIONAL SOIL SAMPLE ANALYTICAL RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

SAMPLE SOURCE	DATE SAMPLED	DEPTH (fbg)	SAMPLE ID	EDB (mg/kg)	EDC (mg/kg)	N-BUTYLBENZENE (mg/kg)	SEC-BUTYLBENZENE (mg/kg)	TERT-BUTYLBENZENE (mg/kg)	NAPHTHALENE (mg/kg)	ISOPROPYLBENZENE (mg/kg)	N-PROPYLBENZENE (mg/kg)	1,2,4-TRIMETHYLBENZENE (mg/kg)	1,3,5-TRIMETHYLBENZENE (mg/kg)	REF
FPD SIL/ESL				0.0005	0.005	26	26	26	1.7	77	26	33	21	N/A
EPA ANALYTICAL METHOD									8260B					N/A
B-20	11-21-08	5	B-20-S-5-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	15	B-20-S-15-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
	11-21-08	20	B-20-S-20-081121	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001	<0.001	0.014	0.004J	A
	11-21-08	25	B-20-S-25-081121	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001	<0.001	<0.001	0.002J	A
	11-21-08	30	B-20-S-30-081121	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	A
POST-REMEDIATION														
B-21	7-22-11	5	B-21-S-5-110722	--	--	<0.0020	--	--	<0.0020	--	<0.0010	<0.0010	<0.0010	B
	7-22-11	10	B-21-S-10-110722	--	--	<0.0020	--	--	<0.0020	--	<0.00099	<0.00099	<0.00099	B
	7-22-11	15	B-21-S-15-110722	--	--	<0.50	--	--	8.6	--	2.3	37	13	B
	7-22-11	20	B-21-S-20-110722	--	--	82	--	--	160	--	120	1,000	330	B
	7-22-11	25	B-21-S-25-110722	--	--	<0.0020	--	--	0.0043	--	<0.0010	0.0022	0.0016	B
	7-22-11	30	B-21-S-30-110722	--	--	<0.0020	--	--	<0.0020	--	<0.0010	<0.0010	<0.0010	B
B-22	7-22-11	5	B-22-S-5-110722	--	--	<0.0020	--	--	<0.0020	--	<0.0010	<0.0010	<0.0010	B
	7-22-11	10	B-22-S-10-110722	--	--	<2.5	--	--	19	--	18	140	53	B
	7-22-11	15	B-22-S-15-110722	--	--	<0.49	--	--	0.79	--	0.63	7.8	3.1	B
	7-22-11	20	B-22-S-20-110722	--	--	<12	--	--	57	--	35	360	110	B
	7-22-11	25	B-22-S-25-110722	--	--	<0.0020	--	--	<0.0020	--	<0.00099	<0.00099	<0.00099	B
	7-22-11	30	B-22-S-30-110722	--	--	<0.0020	--	--	0.0038	--	<0.00099	0.0078	0.0020	B

<# = not detected at the reporting or detection limit indicated. -- = not analyzed. = pre-remediation. = concentration above FPD SIL.
A = Holguin, Fahan & Associates, Inc.'s (HFA's) report dated February 18, 2009.
B = HFA's report dated December 20, 2011.

TABLE 3.
COMPARISON OF PRE-REMEDIATION AND POST-REMEDIATION RESULTS
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

	PRE-REMEDIATION			POST-REMEDIATION			PRE-REMEDIATION			POST-REMEDIATION		
	SB1			B-21			B-18			B-22		
DEPTH (fbg)	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	NAPHTHALENE (mg/kg)	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	NAPHTHALENE (mg/kg)	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	NAPHTHALENE (mg/kg)	TPH AS GASOLINE (mg/kg)	BENZENE (mg/kg)	NAPHTHALENE (mg/kg)
5	3,470	220	35,000	<0.37	<0.0010	<0.0020	85	<0.026	6.4	<0.38	<0.0010	<0.0020
10	6,300	7,000	28,500	<0.39	<0.0099	<0.0020	5,600	51	43	1,400	<1.0	19
15	1,800	11,700	48,100	530	<0.20	8.6	3,500	52	41	430	<0.20	0.79
20	20,700	ND<2,000	82,000	2,800	<10	160	500	0.39	8.6	830	<4.9	57
25	51.6	ND<10	745	<0.38	<0.0010	0.0043	400	<0.026	5.4	<0.38	<0.00099	<0.0020
30	ND<0.5	ND<2	ND<10	<0.38	<0.0010	<0.0020	0.2J	<0.0005	0.002J	43	<0.00099	0.0038
35	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
40	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
50	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
60	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
70	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
80	0.86	5	ND<10	--	--	--	--	--	--	--	--	--
90	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--
100	ND<0.5	ND<2	ND<10	--	--	--	--	--	--	--	--	--

ND<# = not detected at the reporting limit indicated. -- = not analyzed at depth.

TABLE 4.
ESTIMATE OF RESIDUAL MASS OF HYDROCARBONS IN SOIL
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

The mass of residual hydrocarbons was calculated as follows:

$$M(compound)_s = C_s P_b V_s$$

where:

$M(compound)_s$ = Total mass in soil (kg);
C_s = Average concentration in soil (kg/kg) (post-remediation concentrations);
P_b = Bulk density of dry soil (kg/m^3); and
V_s = Volume of impacted soil (m^3).

TPH AS GASOLINE	
AVERAGE TPH AS GASOLINE CONCENTRATION C_s	
Average TPH as gasoline concentration 1,000 mg/kg contour	2,100
Average TPH as gasoline concentration 100 mg/kg contour	597
BULK DENSITY OF SOIL P_b	
Bulk dry density of soil interval P_b (kg/m^3)	1,750
VOLUME V_s	
Area of impact 1,000 mg/kg contour ($feet^2$)	60
Area of impact 100 mg/kg contour ($feet^2$)	224
Thickness of soil interval 1,000 mg/kg contour (feet)	5
Thickness of soil interval 100 mg/kg contour (feet)	12
Volume of soil interval ($feet^3$)	2,688
Volume of soil interval V_s (m^3)	76
Total mass of TPH as gasoline in soil $M_s=C_sP_bV_s$ (kg)	110.6

XYLENE	
AVERAGE XYLENE CONCENTRATION C_s	
Average Xylene concentration (mg/kg)	510
BULK DENSITY OF SOIL P_b	
Bulk dry density of soil interval P_b (kg/m^3)	1,750
VOLUME V_s	
Area of impact ($feet^2$)	92
Average Thickness of soil interval (feet)	5
Volume of soil interval ($feet^3$)	460
Volume of soil interval V_s (m^3)	13
Total mass of Xylene in soil $M_s=C_sP_bV_s$ (kg)	11.6

TABLE 4.
ESTIMATE OF RESIDUAL MASS OF HYDROCARBONS IN SOIL
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

NAPHTHALENE	
AVERAGE NAPHTHALENE CONCENTRATION C_s	
Average Naphthalene concentration (mg/kg)	61
BULK DENSITY OF SOIL P_b	
Bulk dry density of soil interval P_b (kg/m^3)	1,750
VOLUME V_s	
Area of impact (feet^2)	256
Average Thickness of soil interval (feet)	7
Volume of soil interval (feet^3)	1,792
Volume of soil interval V_s (m^3)	51
Total mass of Naphthalene in soil $M_s=C_sP_bV_s$ (kg)	5.4

1,2,4-TRIMETHYLBENZENE	
AVERAGE 1,2,4-TRIMETHYLBENZENE CONCENTRATION C_s	
Average 1,2,4-Trimethylbenzene concentration (mg/kg)	500
BULK DENSITY OF SOIL P_b	
Bulk dry density of soil interval P_b (kg/m^3)	1,750
VOLUME V_s	
Area of impact (feet^2)	90
Average Thickness of soil interval (feet)	7
Volume of soil interval (feet^3)	630
Volume of soil interval V_s (m^3)	18
Total mass of 1,2,4-Trimethylbenzene in soil $M_s=C_sP_bV_s$ (kg)	15.6

1,3,5-TRIMETHYLBENZENE	
AVERAGE 1,3,5-TRIMETHYLBENZENE CONCENTRATION C_s	
Average 1,3,5-Trimethylbenzene concentration (mg/kg)	164
BULK DENSITY OF SOIL P_b	
Bulk dry density of soil interval P_b (kg/m^3)	1,750
VOLUME V_s	
Area of impact (feet^2)	90
Average Thickness of soil interval (feet)	7
Volume of soil interval (feet^3)	630
Volume of soil interval V_s (m^3)	18
Total mass of 1,3,5-Trimethylbenzene in soil $M_s=C_sP_bV_s$ (kg)	5.1

APPENDICES

APPENDIX 1.

AGENCY CORRESPONDENCE

Fire Department

"Serving the community since 1926"

HEADQUARTERS

4410 Cathedral Oaks Road
Santa Barbara, CA 93110-1042
(805) 681-5500 FAX: (805) 681-5553

Michael W. Dyer
Fire Chief
County Fire Warden

Christian J. Hahn
Deputy Fire Chief

February 21, 2012

Ms. Stephanie McKenna
Chevron EMC
6101 Bollinger Canyon Road
San Ramon, CA 94583

Crestfield Holdings
C/o Lamb & Kawakami, LLP
Attn: Ms. Namrata Dwivedi
333 South Grand Avenue, 42nd Floor
Los Angeles, CA 90071

Mr. Steve Wagner
City of Goleta
130 Cremona Drive, Suite B
Goleta, CA 93117

Dear Responsible Parties:

SUBJECT: Former Chevron Station #9-4268/ Future Fire Station #10
7952 Hollister Avenue, Goleta, California
LUFT Site #502421

The Santa Barbara County Fire Department, Fire Prevention Division (FPD) Leaking Underground Fuel Tank (LUFT) Program has reviewed the document prepared by your consultant, Holguin, Fahan & Associates, Inc., titled *Verification Soil Sampling Report and Mass Calculation of Residual Hydrocarbons (Report)*, dated December 20, 2011. The *Report* estimates that approximately 148 kilograms of residual contamination reside within 76 cubic meters of soil. The soil impacts are present from 10 to 20 feet below grade. Based upon the data, the soil vapor extraction system removed over 90% of the initial mass. The residual contamination consists of the less volatile constituents. The *Report* recommends case closure.

After careful review of the report and site file, FPD concurs that further corrective action is not warranted at this site. Please submit and case closure report and well abandonment workplan to FPD by **April 6, 2012**. If you have any questions regarding the aforementioned, please call me at (805) 686-8176. Written correspondence regarding this matter should be submitted to FPD at 1430 Mission drive, Solvang, CA 93463 or via facsimile at (805) 686-8183.

Sincerely,

Thomas M. Rejzek
Professional Geologist #6461
Certified Hydrogeologist #601
LUFT Program

pc: Mr. Mark Fahan, Holguin, Fahan & Associates, Inc., Ventura
Geotracker Database

502421 02_12

From: "Rejzek, Tom" <Tom.Rejzek@sbcfire.com>
Subject: **RE: Closure Summary Report Due Date Extension - Chevron 94268, 7952 Hollister Avenue, Goleta (FPD LUFT #502421)**
Date: March 30, 2012 11:46:06 AM PDT
To: 'Jeff Nobriga' <jeff_nobriga@hfa.com>
Cc: Stephanie McKenna <smckenna@chevron.com>, Mark Fahan <mark_fahan@hfa.com>, Todd McFarland <todd_mcfarland@hfa.com>

---

jeff- your extension request is granted.

Thomas Rejzek

Professional Geologist #6461

Certified Hydrogeologist #601

Santa Barbara County Fire Department

LUFT Program

1430 Mission Drive

Solvang, CA 93463

805-686-8176

tom.rejzek@sbcfire.com

From: Jeff Nobriga [mailto:jeff_nobriga@hfa.com]
Sent: Friday, March 30, 2012 9:51 AM
To: Rejzek, Tom
Cc: Stephanie McKenna; Mark Fahan; Todd McFarland
Subject: Closure Summary Report Due Date Extension - Chevron 94268, 7952 Hollister Avenue, Goleta (FPD LUFT #502421)

Tom,

In FPD correspondence dated February 21, 2012, submittal of a well abandonment work plan and case closure summary report was required by April 6, 2012. HFA/Chevron submitted the well abandonment work plan on March 1, 2012, and indicated the case closure summary report would be submitted to the FPD upon completion of well abandonment activities.

Pending FPD approval of the well abandonment work plan, an extension for submittal of the case closure summary report is requested until June 29, 2012, in order to complete well abandonment activities and prepare the case closure summary report, as discussed in our telephone conversation today.

Thank you.

Jeff R. Nobriga
Holguin, Fahan & Associates, Inc.
50 West Main Street, Ventura, CA 93001
Direct: 805.641.4089 I Cell: 805.766.8427 I Fax: 805.641.1654
jeff_nobriga@hfa.com I www.hfa.com

APPENDIX 2.

HISTORICAL SAMPLING RESULTS

Table 1 - Soil Analytical Results - TPH and VOCs
Previous Confirmation Soil Sampling Assessments
Former Service Station - 7952 Hollister Avenue, Goleta, California

Boring	Depth	TPH			VOCs												
		GRO (C6-C10) (mg/kg)	DRO (C10 to C28) (mg/kg)	ORO (C28+) (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl-benzene (µg/kg)	Total Xylenes (µg/kg)	N-Butyl benzene (µg/kg)	Isopropyl-benzene (µg/kg)	Naphthalene (µg/kg)	n-Propyl-benzene (µg/kg)	1,2,4-TMB (µg/kg)	1,3,5 -TMB (µg/kg)	MTBE (µg/kg)	Oxygenates (µg/kg)	Other VOCs (µg/kg)
Previous Assessment - February 25, 1997 - Remediation Confirmation Sampling - Sampling performed by FLOUR DANIEL GTI																	
B10	5	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	10	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	15	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	20	73	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	25	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	30	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
B11	5	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	10	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	15	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	20	**810**	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	25	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
B12	5	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	10	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	15	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	21	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
	26	ND<0.1	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	ND<0.5	--	ND
Previous Assessment - February 21, 2008 - Additional Site Assessment (Near former boring B11 and Northeast of boring B11) - Sampling performed by Rincon Consultants, Inc.																	
SB1	5	**3,470**	ND<10	ND<50	**220**	440	ND<200	117,500	ND<1,000	ND<1,000	**35,000**	ND<1,000	**170,000**	**83,000**	ND<5	ND	ND
	10	**6,300**	ND<10	ND<50	**7,000**	**250,000**	**113,000**	**811,000**	15,800	ND<10,000	**28,500**	**31,500**	**210,000**	**67,600**	ND<5	ND	ND
	15	**8,570**	ND<10	ND<50	**11,700**	**263,000**	**111,000**	**1,141,000**	25,000	10,000	**48,100**	**42,400**	**341,000**	**108,000**	ND<5	ND	ND
	20	**20,700**	ND<10	ND<50	**ND<2,000**	**513,000**	**444,000**	**1,086,000**	**60,000**	37,400	**82,000**	**139,000**	**933,000**	**296,000**	ND<5	ND	ND
	25	51.6	ND<10	ND<50	ND<10	36	19	145	225	ND<50	745	ND<50	535	209	ND<5	ND	ND
	30	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	8.8	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	35	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	12.7	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	40	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	5.8	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	50	ND<0.5	ND<10	ND<50	ND<2	2.9	ND<2	9.2	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	60	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	70	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	80	0.86	ND<10	ND<50	5	37	13	94	ND<10	ND<10	ND<10	ND<10	24	ND<10	ND<5	ND	ND
	90	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	100	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
SB2	5	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	10	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	15	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	20	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	25	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
	30	ND<0.5	ND<10	ND<50	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<5	ND	ND
SBCFPD - IL		*200**	*200*	*200*	*100 to 200^*	*15,000*	*30,000*	*175,000*	*26,000*	*77,000*	*17,000*	*26,000*	*33,000*	*21,000*	*50*	*Varies*	*Varies*

mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
ND - Not detected above the laboratory practical quantitation limits
-- Not analyzed
SBCFPD - IL - Santa Barbara County, Fire Prevention Division - Investigation Level
* The SBCFPD IL for TPH in soil where groundwater is greater than 50 feet from the soil contamination is 200 mg/kg.
^ The SBCFPD IL for benzene in soil is 100 ug/kg, however, if groundwater is greater than 100 feet below the soil contamination, the IL is 200 ug/kg.
Concentrations in **BOLD** exceed SBCFPD investigation levels

TPH - Total petroleum hydrocarbons
GRO - Gasoline range organics
DRO - Diesel range organics
ORO - Oil range organics
VOCs - Volatile organic compounds
TMB - Trimethylbenzene

Analyses: TPH full range (C6 to C28+) - EPA Method 8015M
VOCs - EPA Method 8260B except for borings B10, B11 and B12 which were analyzed for BTEX and MTBE using EPA Method 8020

Table 2 - Soil Analytical Results - TPH and VOCs
April 24, 2008 Soil Sampling Assessment
Former Service Station - 7952 Hollister Avenue, Goleta, California

Boring	Depth (feet)	TPH-GRO (C6-C10) (mg/kg)	VOCs						
			Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	Naphthalene (µg/kg)	1,2,4-TMB (µg/kg)	Other VOCs (µg/kg)
Current Assessment - April 24, 2008 - Additional Soil Assessment (surrounding former boring SB1)									
SB3	5	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	10	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	15	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	20	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	25	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	30	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
SB4	5	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	10	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	15	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	20	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	25	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	30	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
SB5	5	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	10	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	15	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	20	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	25	0.814	ND<2	ND<2	ND<2	2	52	27	ND
	30	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	35	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	40	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
SB6	5	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	10	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	15	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	20	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	25	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	30	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	35	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
	40	ND<0.5	ND<2	ND<2	ND<2	ND<4	ND<10	ND<10	ND
SBCFPD - IL		*200**	*100 to 200^*	*15,000*	*30,000*	*175,000*	*17,000*	*33,000*	*Varies*

Soil samples collected on April 24, 2008
SBCFPD - IL - Santa Barbara County, Fire Prevention Division - Investigation Level
^ The SBCFPD IL for benzene in soil is 100 ug/kg, however, if groundwater is greater than 100 feet below the soil contamination, the IL is 200 ug/kg.
ND - Not detected above the laboratory practical quantitation limits
TPH-GRO - Total petroleum hydrocarbons -Gasoline range organics
VOCs - Volatile organic compounds
TMB - Trimethylbenzene
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
Soil samples analyzed by American Scientific Laboratories

Analyses: TPH- GRO (C6 to C10) - EPA Method 8015M
VOCs - EPA Method 8260B

APPENDIX 3.

WELL LOGS

LITHOLOGY
(UNIFIED SOIL CLASSIFICATION SYSTEM)

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS LARGER THAN No. 200 SIEVE	GRAVEL MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SAND MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE-GRAINED SOILS MORE THAN HALF IS SMALLER THAN No. 200 SIEVE	SILT AND CLAY		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILT AND CLAY		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOIL			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

SYMBOLS AND ACRONYMS

- SOIL SAMPLE COLLECTED
- GROUNDWATER SAMPLE COLLECTED (HYDROPUNCH® OR SIMILAR)
- SAMPLE NOT RECOVERED
- GROUNDWATER ENCOUNTERED DURING DRILLING

- WELL BOX WITH LOCKING CAP
- BLANK SCHEDULE 40 PVC CASING
- MICROPOROUS BUBBLER
- SLOTTED SCHEDULE 40 PVC CASING
- BOTTOM PLUG

- 0.25-INCH NYLON TUBING WITH GAS-TIGHT CAP
- STEEL PROBE

BOREHOLE COMPLETION

- ASPHALT/CONCRETE SURFACE PATCH
- CONCRETE
- BENTONITE CHIPS OR PELLETS
- BENTONITE/CEMENT GROUT
- FILTER PACK

PID = PHOTOIONIZATION DETECTOR
ppmv = PARTS PER MILLION BY VOLUME
fbg = FEET BELOW GRADE
USCS = UNIFIED SOIL CLASSIFICATION SYSTEM
PVC = POLYVINYLCHLORIDE

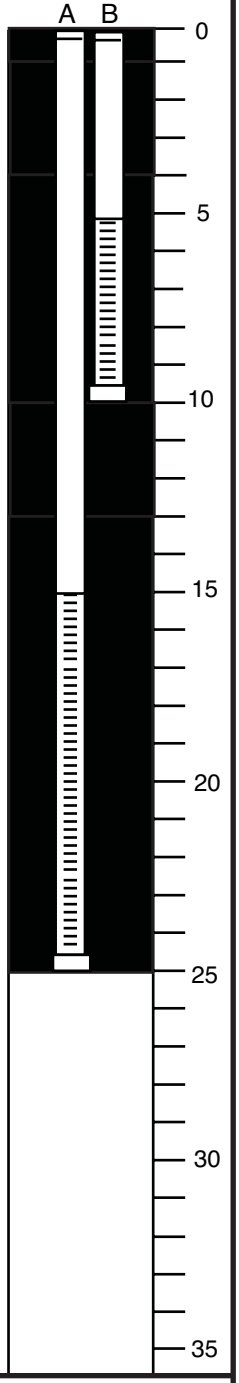
HOLGUIN, FAHAN & ASSOCIATES, INC.

KEY TO LOG OF EXPLORATORY BORING

SAMPLE INTERVAL: SOIL	GROUNDWATER	DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain	BLOWS PER 6 INCHES	PID (ppmv)	USCS
		0	SILTY SAND: 0/70/30, well graded, brown, fine to medium grained sand, medium dense, moist, no stain	--	0	SM
		5				
		10	0/85/15, dense sand, light gray stain	30,50	0	
		15	SANDY CLAY: 0/20/80, low plasticity, brown, fine grained sand, very stiff, moist, no stain	17,20,36	731	CL
		20	0/25/75	19,26,33	1881	
		25	SAND: 0/100/0, well graded, light brown, fine to medium grained, medium dense, moist, no stain	17,24,32	90	SW
		30				
		35				

- [ ] SOIL BORING
- [ ] GROUNDWATER WELL
- [x] VADOSE WELL
- [ ] SPARGING WELL
- [ ] SOIL GAS PROBE

CASING: (2) 2" Schedule 40 PVC
SLOT SIZE: 0.02
FILTER PACK: #3 sand



DRILLING METHOD: CME-75, 10" hollow-stem auger	DATE DRILLED: July 20, 2010
SAMPLER TYPE: 2" California-modified split-spoon	LOGGED BY: Nick Pryor
TOTAL BORING DEPTH: 25 fbg	APPROVED BY: Mark R. Fahan, PG #4279
DEPTH TO WATER: not encountered	DRILLED BY: Cascade Drilling, L.P.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

V-1

REVISION DATE: MARCH 11, 2010:MGH

CLIENT: Chevron Environmental Management Company

PROJECT: Former Service Station #9-4268

LOCATION: 7952 Hollister Avenue, Goleta, California

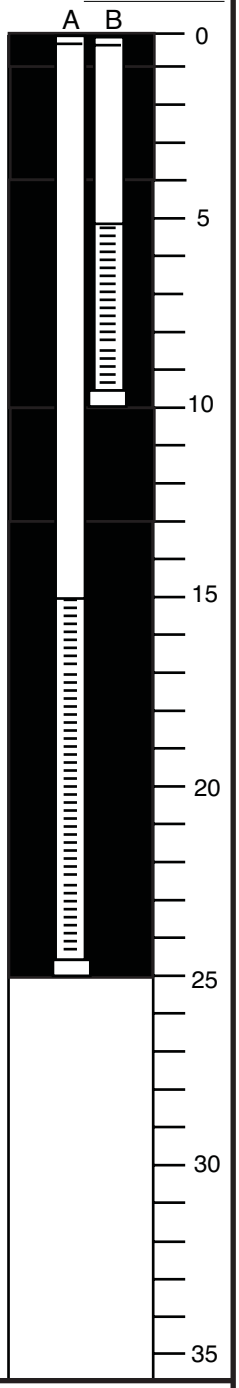
SAMPLE INTERVAL: SOIL	GROUNDWATER	DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain	BLOWS PER 6 INCHES	PID (ppmv)	USCS
		0	SILTY SAND: 0/70/30, well graded, brown, fine to medium grained, medium dense, moist, no stain	--	0	SM
		5				
		10	0/60/40, greenish gray stain	7,14,22	1230	
		15	hydrocarbon odor	14,22,28	2539	
		20	0/80/20	16,21,25	1526	
		25	SAND: 0/100/0, well graded, light brown, fine to medium grained, medium dense, moist, no stain	18,22,27	162	SW
		30				
		35				

- [ ] SOIL BORING
- [ ] GROUNDWATER WELL
- [x] VADOSE WELL
- [ ] SPARGING WELL
- [ ] SOIL GAS PROBE

CASING: (2) 2" Schedule 40 PVC

SLOT SIZE: 0.02

FILTER PACK: #3 sand



DRILLING METHOD: CME-75, 10" hollow-stem auger

SAMPLER TYPE: 2" California-modified split-spoon

TOTAL BORING DEPTH: 25 fbg

DEPTH TO WATER: not encountered

DATE DRILLED: July 20, 2010

LOGGED BY: Nick Pryor

APPROVED BY: Mark R. Fahan, PG #4279

DRILLED BY: Cascade Drilling, L.P.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

V-2

REVISION DATE: MARCH 11, 2010:MGH

SAMPLE INTERVAL: SOIL	GROUNDWATER	DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain	BLOWS PER 6 INCHES	PID (ppmv)	USCS
		0	SILTY SAND: 0/70/30, well graded, brown, fine to medium grained, medium dense, moist, no stain	--	0	SM
		5				
		10	0/60/40, very dense	8,10,14	0	
		15	0/85/15	13,16,18	6	
		20	SANDY CLAY: 0/15/85, low plasticity, brown, fine to medium grained sand, very stiff, moist, no stain	12,14,18	107	CL
		25	SAND: 0/100/0, well graded, brown, fine to medium grained, medium dense, moist, no stain	7,10,14	43	SW
		30	SANDY CLAY: 0/25/75, low plasticity, brown, fine to medium grained sand, very hard, moist, no stain	9,15,18	14	CL
		35				

CLIENT: Chevron Environmental Management Company

PROJECT: Former Service Station #9-4268

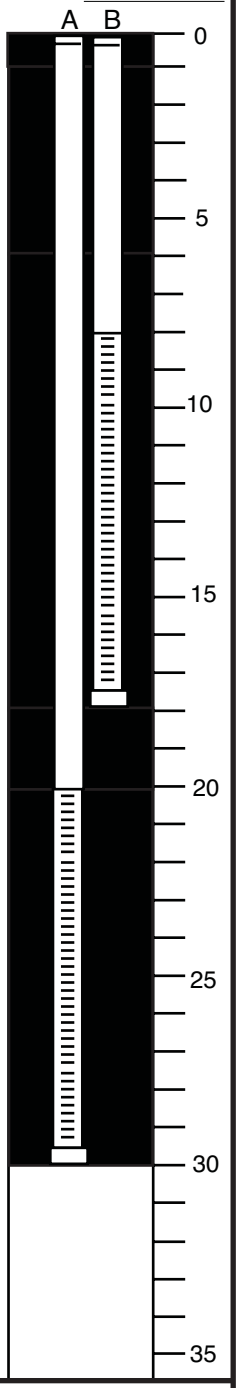
LOCATION: 7952 Hollister Avenue, Goleta, California

- [ ] SOIL BORING
- [ ] GROUNDWATER WELL
- [x] VADOSE WELL
- [ ] SPARGING WELL
- [ ] SOIL GAS PROBE

CASING: (2) 2" Schedule 40 PVC

SLOT SIZE: 0.02

FILTER PACK: #3 sand



DRILLING METHOD: CME-75, 10" hollow-stem auger	DATE DRILLED: July 20, 2010
SAMPLER TYPE: 2" California-modified split-spoon	LOGGED BY: Nick Pryor
TOTAL BORING DEPTH: 30 fbg	APPROVED BY: Mark R. Fahan, PG #4279
DEPTH TO WATER: not encountered	DRILLED BY: Cascade Drilling, L.P.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

V-3

REVISION DATE: MARCH 11, 2010:MGH

CLIENT: Chevron Environmental Management Company

PROJECT: Former Service Station #9-4268

LOCATION: 7952 Hollister Avenue, Goleta, California

DESCRIPTION AND SOIL CLASSIFICATION

NAME: %gravel/sand/fines, gradation/plasticity, color, angularity, maximum size (gravels), density/consistency, moisture, stain

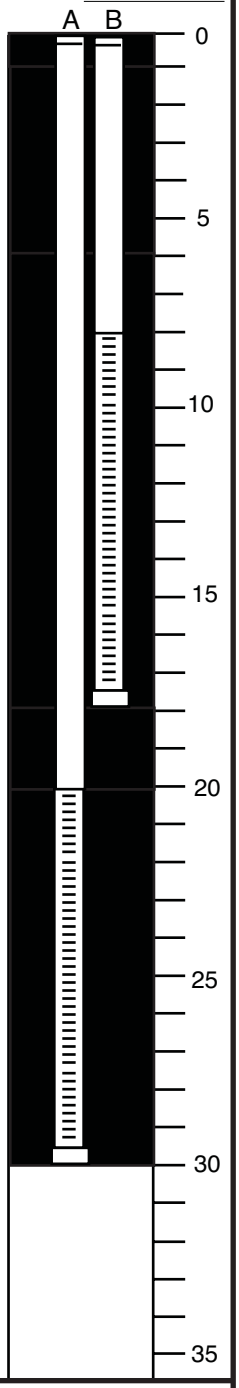
SAMPLE INTERVAL: SOIL	GROUNDWATER	DEPTH (fbg)	DESCRIPTION AND SOIL CLASSIFICATION	BLOWS PER 6 INCHES	PID (ppmv)	USCS
		0	SILTY SAND: 0/70/30, well graded, brown, fine to medium grained, medium dense, moist, no stain			SM
		5		--	0	
		10	0/85/15, dense, greenish gray hydrocarbon stain	12,18,25	3000	
		15	0/60/40	20,27,30	838	
		20		15,19,26	2155	
		25	0/80/20, no stain	25,30,40	476	
		30	0/85/15	18,24,34	4.3	
		35				

- [ ] SOIL BORING
- [ ] GROUNDWATER WELL
- [x] VADOSE WELL
- [ ] SPARGING WELL
- [ ] SOIL GAS PROBE

CASING: (2) 2" Schedule 40 PVC

SLOT SIZE: 0.02

FILTER PACK: #3 sand



DRILLING METHOD: CME-75, 10" hollow-stem auger

SAMPLER TYPE: 2" California-modified split-spoon

TOTAL BORING DEPTH: 30 fbg

DEPTH TO WATER: not encountered

DATE DRILLED: July 21, 2010

LOGGED BY: Nick Pryor

APPROVED BY: Mark R. Fahan, PG #4279

DRILLED BY: Cascade Drilling, L.P.

HOLGUIN, FAHAN & ASSOCIATES, INC.

LOG OF EXPLORATORY BORING

V-4

Page 1 of 1

REVISION DATE: MARCH 11, 2010:MGH

APPENDIX 4.

SUMMARY OF SVE OPERATIONS

Quarterly Progress Report
Second Quarter 2011

Summary Sheet
Operations

Chevron Environmental Management Company
Chevron Former Service Station #9-4268
7952 Hollister Avenue
Goleta, California

SBCAPCD ATC # **13462**

VAPOR EXTRACTION PERFORMANCE

Date Started: August 24, 2010

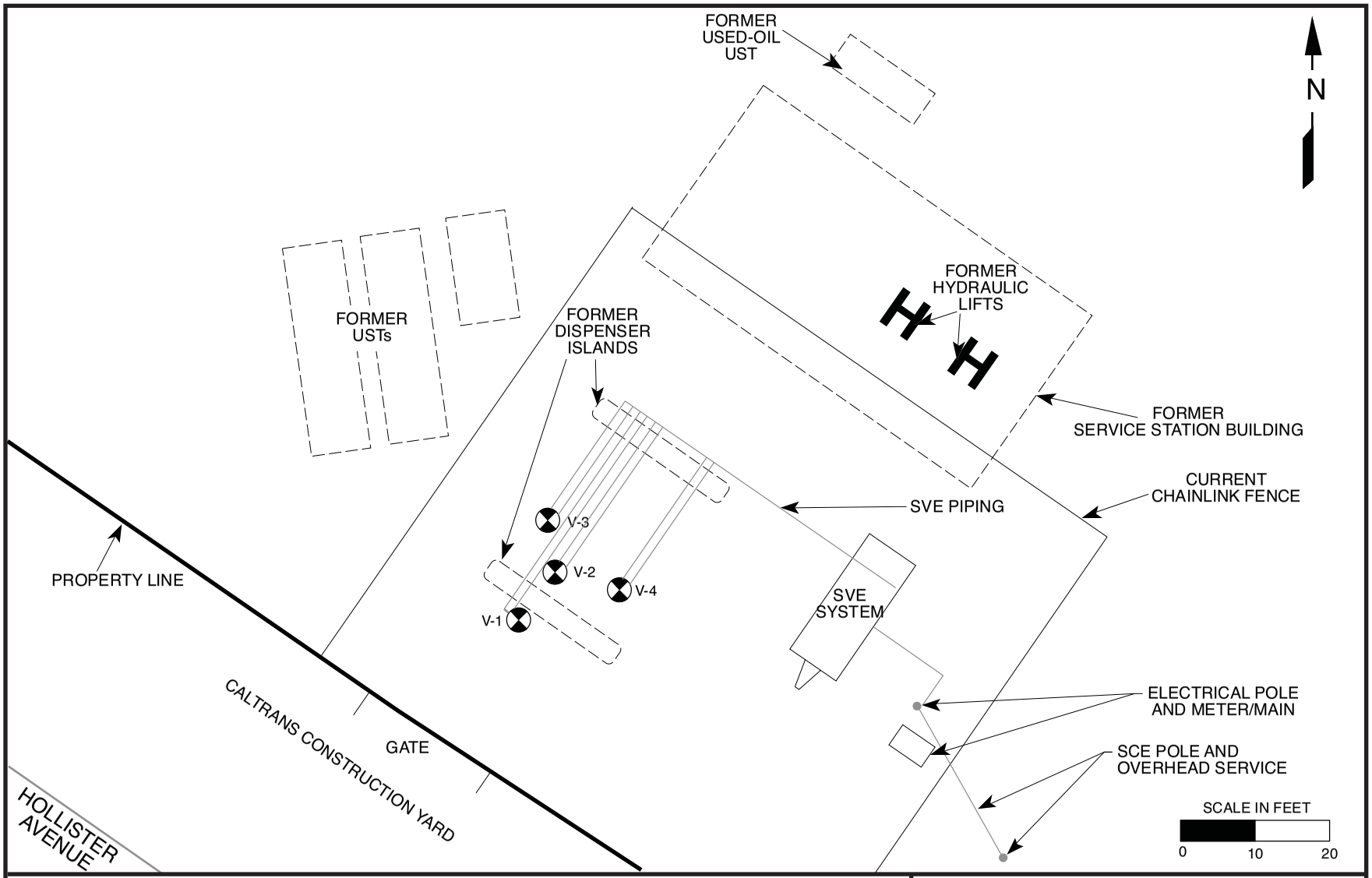
Treatment technology used:	Catalytic oxidizer		
Number of vapor extraction wells on-site:	8		
		V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	
Number of vapor extraction wells open:	0	Maximum influent TPHg concentration this quarter (ppmv):	350
Operating days this quarter:	12	Pounds of hydrocarbons removed this quarter:	78
Total operating days:	154	Cumulative pounds of hydrocarbons removed:	3,482
		Operating mode:	Catalytic

CURRENT QUARTERLY OPERATIONS

HFA started the SVE system on August 24, 2010.
HFA performed Emission Verification Tests (EVT) on September 1, 9, and 24, 2010. Results of each EVT did not meet the 95% destruction efficiency requirement of SBCAPCD ATC #13462.
HFA shut down the SVE system on September 24, 2010, pending SBCAPCD SCDP extension.
HFA received written approval to restart the SVE system from the SBCAPCD on October 1, 2010. The SBCAPCD extended the SCDP until January 30, 2011.
The SVE was restarted on October 4, 2010.
Representatives from Chevron, the City of Goleta, the FPD, and HFA met on-site on December 2, 2010, to inspect and review site operations.
HFA performed an Emission Verification Test (EVT) on December 15, 2010. Results indicated compliance with the requirements of SBCAPCD ATC #13462.
The system was shutdown on March 21, 2011, for rebound evaluation.
The system was restarted on April 4, 2011, for rebound evaluation.
The system was shutdown on April 22, 2011.

FUTURE PLANNED OPERATIONS

HFA will perform verification sampling upon work plan approval by the FPD.



EXPLANATION

SOIL VAPOR EXTRACTION WELL

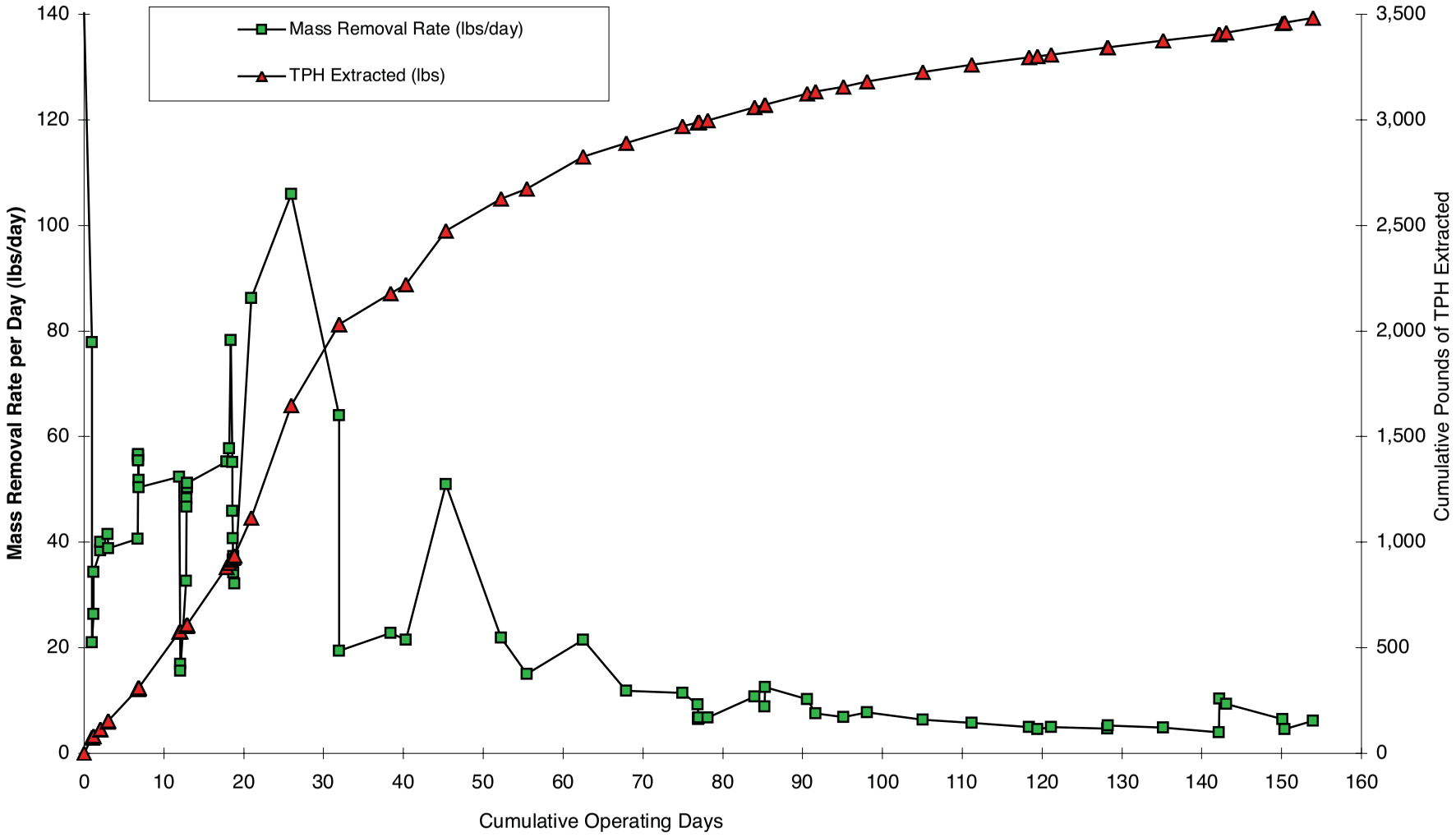
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

FORMER SERVICE STATION #9-4268
7952 HOLLISTER AVENUE
GOLETA, CALIFORNIA
FIGURE 1 - PLOT PLAN

HOLGUIN, FAHAN & ASSOCIATES, INC.

REVISION DATE: JANUARY 5, 2011: MGH

FIGURE 2 - MASS REMOVAL RATE PER DAY AND CUMULATIVE POUNDS OF TPH EXTRACTED
CHEVRON FORMER SERVICE STATION #9-4268,
7952 HOLLISTER AVENUE, GOLETA, CALIFORNIA



LIST OF ACRONYMS

ATC	authority to construct
EVT	emissions verification test
FPD	Santa Barbara County Fire Department, Fire Prevention Division
lbs	pounds
LUFT	leaking underground fuel tank
ppmv	parts per million by volume
SBCAPCD	Santa Barbara County Air Pollution Control District
SCDP	source compliance demonstration period
SVE	soil vapor extraction
TPH	total petroleum hydrocarbons
TPHg	total petroleum hydrocarbons as gasoline
UST	underground storage tank

EXHIBIT 1.

SUMMARY OF REMEDIATION SYSTEM MONITORING DATA

TABLE 1.
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM MONITORING DATA
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

Date Monitored	Cumulative Operating Hours	Cumulative Operating Days	Total Flow (scfm)	Field Influent (ppmv)	Field Effluent (ppmv)	Lab Certified TPH In (ppmv)	Lab Certified Benzene In (ppmv)	Lab Instantaneous TPH Lbs/Hour Extracted	Field TPH Extraction rate Lbs/Hour	TPH Cumulative Lbs Extracted	Average TPH Lbs/Hour Emitted	TPH Cumulative Lbs Emitted	PID (OVM) Calibration Date	Inlet Oxidizer Temp (°F)	Outlet Oxidizer Temp (°F)	Operating Extraction Wells	Comments
8/24/10	0.0	0	60	7,196	10.3	1,800	9.7	1.70	5.85	0	0.008	0	8-24-10	704	965	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System startup, system O&M.
8/25/10	23.0	1	60	780	0.0	--	--	--	3.24	75	0.004	0	8-25-10	700	850	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/25/10	24.1	1	100	820	0.0	--	--	--	0.87	76	0.000	0	8-25-10	705	910	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/25/10	28.2	1	100	800	15.0	--	--	--	1.10	80	0.010	0	8-25-10	709	882	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/25/10	29.0	1	113	1,150	20.0	--	--	--	1.43	81	0.026	0	8-25-10	690	877	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/26/10	48.5	2	118	890	0.0	--	--	--	1.60	112	0.015	0	8-26-10	710	843	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/26/10	49.4	2	154	910	0.0	--	--	--	1.67	114	0.000	0	8-26-10	703	856	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/27/10	70.5	3	165	690	0.0	--	--	--	1.73	150	0.000	0	8-27-10	705	805	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
8/27/10	72.8	3	180	690	5.0	--	--	--	1.62	154	0.006	0	8-27-10	698	804	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/1/10	161.6	7	187	920	90.0	--	--	--	1.69	304	0.121	11	9-1-10	700	743	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 9:15.
9/1/10	162.1	7	185	910	85.0	--	--	--	2.32	305	0.222	11	9-1-10	698	742	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 9:45.
9/1/10	162.6	7	185	950	90.0	260	1.2	0.76	2.35	307	0.221	11	9-1-10	701	745	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 10:15.
9/1/10	163.1	7	185	920	85.0	--	--	--	2.36	308	0.221	12	9-1-10	701	744	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 10:45.
9/1/10	163.6	7	186	910	95.0	270	1.4	0.79	2.31	309	0.227	12	9-1-10	699	743	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 11:15.
9/1/10	164.1	7	185	800	85.0	--	--	--	2.16	310	0.227	12	9-1-10	697	743	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 11:45.
9/1/10	164.6	7	184	870	90.0	260	1.4	0.76	2.10	311	0.220	12	9-1-10	702	743	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 12:15.
9/8/10	286.0	12	192	240	10.6	--	--	--	2.18	576	0.127	27	9-8-10	800	821	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/8/10	288.7	12	192	300	8.8	--	--	--	0.70	578	0.025	27	9-8-10	853	866	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/8/10	289.5	12	192	200	1.7	--	--	--	0.65	579	0.014	27	9-8-10	900	909	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/9/10	307.4	13	195	827	0.6	--	--	--	1.36	603	0.003	27	9-9-10	897	907	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 9:00.
9/9/10	308.0	13	194	690	0.4	--	--	--	2.01	604	0.001	27	9-9-10	898	906	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 9:30.
9/9/10	308.4	13	194	786	0.2	160	ND<1.2	0.49	1.95	605	0.001	27	9-9-10	900	907	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 10:00.
9/9/10	309.0	13	194	808	0.6	--	--	--	2.10	606	0.001	27	9-9-10	903	912	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 10:30.
9/9/10	309.4	13	193	814	2.7	150	ND<1.2	0.46	2.13	607	0.004	27	9-9-10	899	908	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 11:00.
9/9/10	310.0	13	193	785	0.4	--	--	--	2.10	608	0.004	27	9-9-10	901	908	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 11:30.
9/9/10	310.4	13	192	840	0.7	150	ND<1.2	0.46	2.13	609	0.001	27	9-9-10	898	909	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 12:00.
9/14/10	428.6	18	195	905	2.2	--	--	--	2.30	881	0.004	28	9-14-10	902	902	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/22/10	436.5	18	220	1,088	15.7	--	--	--	2.41	900	0.026	28	9-22-10	744	771	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/23/10	441.5	18	199	991	15.9	--	--	--	3.26	916	0.045	28	9-23-10	790	805	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
9/24/10	445.7	19	188	748	0.0	--	--	--	2.30	926	0.022	28	9-24-10	801	814	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 12:00.
9/24/10	446.2	19	187	759	0.0	--	--	--	1.91	927	0.000	28	9-24-10	800	813	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 12:30.

TABLE 1.
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM MONITORING DATA
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

Date Monitored	Cumulative Operating Hours	Cumulative Operating Days	Total Flow (scfm)	Field Influent (ppmv)	Field Effluent (ppmv)	Lab Certified TPH In (ppmv)	Lab Certified Benzene In (ppmv)	Lab Instantaneous TPH Lbs/Hour Extracted	Field TPH Extraction rate Lbs/Hour	TPH Cumulative Lbs Extracted	Average TPH Lbs/Hour Emitted	TPH Cumulative Lbs Emitted	PID (OVM) Calibration Date	Inlet Oxidizer Temp (°F)	Outlet Oxidizer Temp (°F)	Operating Extraction Wells	Comments
9/24/10	446.7	19	187	576	0.0	150	ND<2.3	0.44	1.70	928	0.000	28	9-24-10	800	810	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 13:00.
9/24/10	447.2	19	187	569	0.0	--	--	--	1.46	929	0.000	28	9-24-10	800	811	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 13:30.
9/24/10	447.7	19	187	631	0.0	150	ND<2.2	0.44	1.53	929	0.000	28	9-24-10	800	811	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 14:00.
9/24/10	448.2	19	187	594	0.0	--	--	--	1.56	930	0.000	28	9-24-10	800	811	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, monitor at 14:30.
9/24/10	448.7	19	187	526	0.0	150	ND<2.2	0.44	1.43	931	0.000	28	9-24-10	800	810	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 15:00.
10/4/10	451.8	19	152	1,486	0.0	430	1.7	1.04	1.34	935	0.000	28	10-4-10	809	921	V-1A, V-2A,V-3A, V-4A, V-4B	System restart, O&M, collect samples.
10/7/10	502.2	21	182	1,655	0.0	--	--	--	3.59	1,116	0.000	28	10-7-10	810	853	V-1A, V-2A,V-3A, V-4A, V-4B	System O&M.
10/12/10	622.7	26	193	1,800	0.0	--	--	--	4.41	1,648	0.000	28	10-12-10	800	815	V-1A, V-2A,V-3A, V-4A, V-4B	System O&M.
10/18/10	766.3	32	196	230	0.0	--	--	--	2.67	2,031	0.000	28	10-18-10	800	808	V-1A, V-2A,V-3A, V-4A, V-4B	System O&M.
10/18/10	766.7	32	164	450	0.0	--	--	--	0.81	2,032	0.000	28	10-18-10	817	840	V-1A, V-2A, V-4A, V-4B	System O&M.
10/26/10	921.5	38	170	386	0.0	--	--	--	0.95	2,179	0.000	28	10-26-10	810	833	V-1A, V-2A, V-4A, V-4B	System O&M.
11/3/10	968.1	40	167	1,345	2.6	230	ND<1.2	0.61	0.89	2,220	0.003	28	11-3-10	810	854	V-1A, V-2A, V-4A, V-4B	System restart, O&M, collect samples.
11/8/10	1087.1	45	176	500	5.0	--	--	--	2.13	2,473	0.009	30	11-8-10	809	825	V-1A, V-2A, V-4A, V-4B	System O&M.
11/15/10	1253.4	52	185	250	5.0	--	--	--	0.91	2,625	0.012	32	11-15-10	809	816	V-1A, V-2A, V-4A, V-4B	System O&M.
11/22/10	1331.6	55	180	520	5.0	--	--	--	0.63	2,674	0.012	33	11-22-10	809	823	V-1A, V-2A, V-4A, V-4B	System restart, O&M.
11/29/10	1499.7	62	190	200	5.0	--	--	--	0.90	2,825	0.013	35	11-29-10	813	807	V-1A, V-2A, V-4A, V-4B	System O&M.
12/6/10	1630.1	68	191	180	5.0	47	ND<1.2	0.14	0.49	2,889	0.013	36	12-6-10	810	805	V-1A, V-2A, V-4A, V-4B	System O&M.
12/13/10	1799.0	75	189	190	5.0	--	--	--	0.48	2,970	0.013	39	12-13-10	809	801	V-1A, V-2A, V-4A, V-4B	System O&M.
12/15/10	1845.3	77	190	110	5.0	41	ND<1.2	0.12	0.39	2,988	0.013	39	12-15-10	812	803	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 9:05.
12/15/10	1845.8	77	190	105	5.0	--	--	--	0.28	2,988	0.013	39	12-15-10	808	801	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, monitor at 9:35.
12/15/10	1846.3	77	190	105	5.0	32	ND<1.2	0.10	0.27	2,988	0.013	39	12-15-10	813	807	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 10:05.
12/15/10	1846.8	77	189	110	5.0	--	--	--	0.28	2,988	0.013	39	12-15-10	812	803	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, monitor at 10:35.
12/15/10	1847.3	77	189	105	5.0	33	ND<1.2	0.10	0.28	2,988	0.013	39	12-15-10	808	802	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 11:05.
12/15/10	1847.8	77	190	110	5.0	--	--	--	0.28	2,989	0.013	39	12-15-10	809	801	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, monitor at 11:35.
12/15/10	1848.3	77	189	110	5.0	38	ND<1.2	0.11	0.28	2,989	0.013	39	12-15-10	810	803	V-1A, V-2A, V-4A, V-4B	System O&M, perform EVT, collect samples, monitor at 12:05.
12/21/10	1874.3	78	184	210	5.0	--	--	--	0.28	2,996	0.013	40	12-21-10	800	823	V-1A, V-2A, V-4A, V-4B	System restart, O&M.
12/27/10	2015.3	84	117	230	10.0	--	--	--	0.45	3,059	0.014	42	12-27-10	805	840	V-1A, V-2A, V-4A, V-4B	System O&M.
1/3/11	2046.2	85	114	342	8.7	--	--	--	0.37	3,071	0.015	42	1-3-11	811	860	V-1A, V-2A, V-4A, V-4B	System restart, O&M, collect samples.
1/3/11	2047.5	85	140	272	8.4	260	ND<1.2	0.58	0.52	3,071	0.015	42	1-3-11	811	851	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
1/10/11	2173.0	91	124	200	10.0	--	--	--	0.43	3,125	0.016	44	1-10-11	808	828	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
1/17/11	2199.7	92	124	170	5.0	--	--	--	0.31	3,133	0.013	44	1-17-11	816	830	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.

TABLE 1.
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM MONITORING DATA
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

Date Monitored	Cumulative Operating Hours	Cumulative Operating Days	Total Flow (scfm)	Field Influent (ppmv)	Field Effluent (ppmv)	Lab Certified TPH In (ppmv)	Lab Certified Benzene In (ppmv)	Lab Instantaneous TPH Lbs/Hour Extracted	Field TPH Extraction rate Lbs/Hour	TPH Cumulative Lbs Extracted	Average TPH Lbs/Hour Emitted	TPH Cumulative Lbs Emitted	PID (OVM) Calibration Date	Inlet Oxidizer Temp (°F)	Outlet Oxidizer Temp (°F)	Operating Extraction Wells	Comments
1/25/11	2282.5	95	125	190	10.0	--	--	--	0.29	3,157	0.013	45	1-25-11	815	857	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System restart, O&M.
1/31/11	2354.0	98	124	160	5.0	--	--	--	0.32	3,180	0.013	46	1-31-11	803	842	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System restart, O&M.
2/7/11	2521.9	105	127	150	10.0	58	ND<1.2	0.12	0.26	3,225	0.013	49	2-7-11	810	825	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M, collect samples.
2/14/11	2668.0	111	125	130	5.0	--	--	--	0.24	3,260	0.013	50	2-14-11	807	831	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
2/21/11	2840.4	118	128	110	5.0	--	--	--	0.21	3,296	0.009	52	2-21-11	806	820	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
2/25/11	2866.8	119	128	120	5.0	--	--	--	0.19	3,301	0.009	52	2-25-11	802	818	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System restart, O&M.
2/28/11	2907.9	121	127	100	5.0	--	--	--	0.21	3,309	0.009	53	2-28-11	800	821	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System restart, O&M.
3/7/11	3075.8	128	124	130	10.0	--	--	--	0.20	3,342	0.013	55	3-7-11	818	828	V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B	System O&M.
3/7/11	3077.4	128	91	180	10.0	89	ND<1.2	0.13	0.22	3,342	0.015	55	3-7-11	813	844	V-1A, V-2A, V-4A, V-4B	System O&M, collect samples.
3/14/11	3244.6	135	91	150	10.0	--	--	--	0.20	3,376	0.012	57	3-14-11	810	817	V-1A, V-2A, V-4A, V-4B	System O&M.
3/21/11	3411.7	142	91	120	10.0	36	ND<1.2	0.05	0.17	3,404	0.012	59	3-21-11	800	822	V-1A, V-2A, V-4A, V-4B	System O&M, shutdown for rebound testing.
4/4/11	3412.4	142	90	350	10.0	--	--	--	0.43	3,405	0.012	59	4-4-11	800	847	V-1A, V-2A, V-4A, V-4B	System restart, O&M.
4/5/11	3433.4	143	86	300	10.0	75	ND<1.2	0.10	0.39	3,413	0.012	59	4-5-11	823	835	V-1A, V-2A, V-4A, V-4B	System O&M, collect samples.
4/12/11	3602.9	150	90	155	5.0	--	--	--	0.27	3,459	0.009	61	4-12-11	818	821	V-1A, V-2A, V-4A, V-4B	System O&M.
4/18/11	3609.8	150	95	200	5.0	--	--	--	0.19	3,460	0.006	61	4-18-11	800	853	V-1A, V-2A, V-4A, V-4B	System restart, O&M.
4/22/11	3693.8	154	93	165	5.0	80	ND<1.2	0.12	0.26	3,482	0.006	61	4-22-11	804	842	V-1A, V-2A, V-4A, V-4B	System restart, collect sample, shutdown.

Temp = temperature. -- = not sampled or not analyzed.
System startup on August 24, 2010.

TABLE 2.
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM WELL DATA
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

Date	Lab TPH Inlet (ppmv)	Lab TPH Outlet (ppmv)	Lab Benzene Inlet (ppmv)	Lab Benzene Outlet (ppmv)	Lab MTBE Inlet (ppmv)	Lab MTBE Outlet (ppmv)	Field TPH Well V-1A (ppmv)	Field TPH Well V-1B (ppmv)	Field TPH Well V-2A (ppmv)	Field TPH Well V-2B (ppmv)	Field TPH Well V-3A (ppmv)	Field TPH Well V-3B (ppmv)	Field TPH Well V-4A (ppmv)	Field TPH Well V-4B (ppmv)
8/24/10	1,800	9.8	9.7	ND<1.2	ND<2.8	ND<2.8	>9,999	102	>9,999	99	148	81	1,807	>9,999
8/25/10	--	--	--	--	--	--	1,550	45	3,250	50	65	75	250	4,500
8/25/10	--	--	--	--	--	--	2,200	50	4,000	60	10	40	310	4,200
8/25/10	--	--	--	--	--	--	650	55	3,200	65	30	80	230	3,500
8/25/10	--	--	--	--	--	--	2,300	60	3,800	55	50	50	330	5,800
8/26/10	--	--	--	--	--	--	1,950	60	4,150	70	0	70	280	5,750
8/26/10	--	--	--	--	--	--	1,850	80	4,150	90	0	120	290	6,100
8/27/10	--	--	--	--	--	--	1,850	50	3,850	55	0	55	200	4,700
8/27/10	--	--	--	--	--	--	1,750	65	3,850	65	5	60	220	5,000
8/30/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/30/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/1/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/1/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/1/10	260	14	1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/1/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/1/10	270	14	1.4	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/1/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/1/10	260	16	1.4	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/8/10	--	--	--	--	--	--	806	50	1,850	50	5	35	40	720
9/8/10	--	--	--	--	--	--	900	50	1,900	50	10	35	50	800
9/8/10	--	--	--	--	--	--	850	35	2,150	50	5	40	50	790
9/9/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/9/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/9/10	160	15	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/9/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/9/10	150	15	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/9/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/9/10	150	11	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
9/14/10	--	--	--	--	--	--	6,850	106	>9,999	163	69	36	972	2,108
9/22/10	--	--	--	--	--	--	>9,999	32	>9,999	0.7	86	3	1,151	3,804
9/23/10	--	--	--	--	--	--	>9,999	75	>9,999	71	95	8	1,346	2,654
9/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/24/10	150	11	ND<2.3	ND<2.3	ND<5.1	ND<5.0	--	--	--	--	--	--	--	--
9/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/24/10	150	11	ND<2.2	ND<2.4	ND<4.9	ND<5.2	--	--	--	--	--	--	--	--
9/24/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/24/10	150	6.7	ND<2.2	ND<2.3	ND<5.0	ND<5.0	--	--	--	--	--	--	--	--
10/4/10	430	6.8	1.7	ND<1.2	ND<2.8	ND<2.8	5,298	--	8,023	--	94	--	1,555	3,119
10/7/10	--	--	--	--	--	--	4,674	--	2,836	--	83	--	692	2,659
10/12/10	--	--	--	--	--	--	3,500	--	4,500	--	50	--	450	3,200
10/18/10	--	--	--	--	--	--	520	--	270	--	45	--	145	380
10/18/10	--	--	--	--	--	--	600	--	290	--	--	--	200	390
10/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/26/10	--	--	--	--	--	--	600	--	290	--	--	--	200	390

TABLE 2.
SUMMARY OF SOIL VAPOR EXTRACTION SYSTEM WELL DATA
CHEVRON FORMER SERVICE STATION #9-4268, GOLETA, CALIFORNIA

Date	Lab TPH Inlet (ppmv)	Lab TPH Outlet (ppmv)	Lab Benzene Inlet (ppmv)	Lab Benzene Outlet (ppmv)	Lab MTBE Inlet (ppmv)	Lab MTBE Outlet (ppmv)	Field TPH Well V-1A (ppmv)	Field TPH Well V-1B (ppmv)	Field TPH Well V-2A (ppmv)	Field TPH Well V-2B (ppmv)	Field TPH Well V-3A (ppmv)	Field TPH Well V-3B (ppmv)	Field TPH Well V-4A (ppmv)	Field TPH Well V-4B (ppmv)
11/3/10	230	3.7	ND<1.2	ND<1.2	ND<2.8	ND<2.8	496	--	305	--	--	--	560	835
11/8/10	--	--	--	--	--	--	340	--	280	--	--	--	350	570
11/15/10	--	--	--	--	--	--	210	--	150	--	--	--	190	210
11/17/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/18/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/22/10	--	--	--	--	--	--	360	--	300	--	--	--	500	540
11/29/10	--	--	--	--	--	--	190	--	120	--	--	--	220	300
12/2/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/3/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/6/10	47	ND<2.4	ND<1.2	ND<1.2	ND<2.8	ND<2.8	180	--	140	--	--	--	170	290
12/13/10	--	--	--	--	--	--	170	--	130	--	--	--	190	280
12/15/10	41	ND<3.9	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
12/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/15/10	32	ND<3.9	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
12/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/15/10	33	ND<4.0	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
12/15/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/15/10	38	2.5	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
12/21/10	--	--	--	--	--	--	160	--	150	--	--	--	230	340
12/27/10	--	--	--	--	--	--	140	--	200	--	--	--	110	220
1/3/11	--	--	--	--	--	--	188	--	360	--	--	--	329	540
1/3/11	260	4.8	ND<1.2	ND<1.2	ND<2.8	ND<2.8	192	38	346	72	102	56	361	492
1/10/11	--	--	--	--	--	--	140	55	440	50	80	70	120	370
1/17/11	--	--	--	--	--	--	130	45	400	50	60	60	130	320
1/25/11	--	--	--	--	--	--	150	40	360	55	50	60	160	350
1/31/11	--	--	--	--	--	--	120	30	350	45	45	60	140	340
2/7/11	58	ND<2.4	ND<1.2	ND<1.2	ND<2.8	ND<2.8	130	45	350	50	45	75	150	360
2/14/11	--	--	--	--	--	--	100	35	320	35	40	55	130	350
2/21/11	--	--	--	--	--	--	90	40	260	45	50	45	90	290
2/25/11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/28/11	--	--	--	--	--	--	110	45	250	40	40	50	100	320
3/7/11	--	--	--	--	--	--	150	60	290	50	50	60	110	380
3/7/11	89	4.6	ND<1.2	ND<1.2	ND<2.8	ND<2.8	160	--	260	--	--	--	130	310
3/14/11	--	--	--	--	--	--	130	--	210	--	--	--	90	230
3/21/11	36	--	ND<1.2	--	ND<2.8	--	120	--	200	--	--	--	100	180
4/4/11	--	--	--	--	--	--	180	--	310	--	--	--	160	320
4/5/11	75	ND<2.4	ND<1.2	ND<1.2	ND<2.8	ND<2.8	--	--	--	--	--	--	--	--
4/12/11	--	--	--	--	--	--	140	--	260	--	--	--	120	280
4/18/11	--	--	--	--	--	--	150	--	430	--	--	--	110	580
4/22/11	80	--	ND<1.2	--	ND<2.8	--	130	--	340	--	--	--	85	510

Lab = laboratory. -- = not measured. = closed.

APPENDIX 5.

CASE CLOSURE SUMMARY

CASE CLOSURE SUMMARY
LUFT

Date of Closure Request: _____

I. Agency Information

Agency name: Santa Barbara County Fire Department, Fire Prevention Division	Address: 1430 Mission Drive
City/State/Zip: Solvang, California 93463	Phone: (805) 686-8176
Responsible staff person: Mr. Thomas Rejzek	Title: Professional Geologist

II. Case Information

Site Facility Name: Chevron Former Service Station #9-4268		LUFT Case #: 502421
Site Facility Address: 7952 Hollister Avenue, Goleta, California		
Responsible Parties	**Addresses**	**Phone Number**
Chevron Environmental Management Company, Attn: Daryl Pessler	145 South State College Boulevard, #400, Brea, California, 92821	(714) 671-3277
City of Goleta, Attn: Claudia Dato	130 Cremona Drive, Suite B, Goleta, California, 93117	(805) 961-7554

III. Tank Information

Tank	Size in Gal.	Contents	Closed in-Place/Removed	Date
1	(2) 10,000	Gasoline	Removed in 1993	1968-1993
2	(1) 6,000	Gasoline	Removed in 1993	1968-1993
3	(1) 1,000	Used-oil	Removed in 1993	1968-1993
4				

IV. Release and Site Characterization Information

Cause and Type of Release: Former southern dispenser island.		
Site Characterization Complete? Yes.	Date approved by oversight agency: February 21, 2012	
Vapor Extraction Wells Installed? Yes.	Number: 4	Proper screened interval? Yes.
Monitoring Wells Installed? No.	Number: 0	Proper screened interval? N/A
Highest GW Depth Below Ground Surface: N/A (Groundwater is estimated to be greater than 100 fbg).	Lowest: N/A	Flow Direction: N/A
Most Sensitive Current Use:		
Are Drinking Water Wells Affected? No.	**Public Supply Aquifer:**	
Is Surface Water Affected? No.	Nearest Affected SW Name: N/A	
Off-Site Beneficial Use Impacts (addresses/locations):		

CASE CLOSURE SUMMARY
LUFT

V. Treatment/Disposal Methods (Attach any additional information)

Material	Amount (Include Units)	Action (Treatment or Disposal Method)	Date
Tanks	4 USTs - (2) 10,000, (1) 6,000, and (1) 1,000 gallon	Disposed	1993
Free Product	N/A	N/A	N/A
Piping	N/A	N/A	N/A
Soil	N/A	N/A	N/A
Groundwater	N/A	N/A	N/A

Maximum Documented Contaminant Concentrations--Before and After Cleanup

Contaminant	Soil (mg/kg)		Water (ppb)		Contaminant	Soil (mg/kg)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	20,700	2,800	N/A	N/A	**1,2-DCA**	<0.51	N/A	N/A	N/A
TPH (Diesel)	ND<10	N/A	N/A	N/A	**Oil/Grease**	ND<50	N/A	N/A	N/A
Benzene	52	<10	N/A	N/A	**Lead**	N/A	N/A	N/A	N/A
Toluene	630	78	N/A	N/A	**MTBE**	0.28J	<25	N/A	N/A
Ethylbenzene	444	130	N/A	N/A	**Other**	N/A	N/A	N/A	N/A
Xylenes	1,200	1,100	N/A	N/A	**EDB**	0.95J	N/A	N/A	N/A

Comments:

VI. Closure

Does completed corrective action protect existing beneficial uses per the RB Basin Plan? Yes.		
Does completed corrective action protect potential beneficial uses per the RB Basin Plan? Yes.		
Does corrective action protect public health for current land use? Yes.		
Site Management Requirements: Abandon all soil vapor extraction wells prior to case closure.		
Should corrective action be reviewed if land use changes? No.		
Vapor Wells Decommissioned? Yes.	Number Decommissioned: 4	Number Retained: 0
Monitoring Wells Decommissioned? N/A	Number Decommissioned: 0	Number Retained: 0

List enforcement actions taken: None.
List enforcement actions rescinded: None.

VII. Local Agency Representative Data

Agency: Santa Barbara County Fire Department, Fire Prevention Division	Address: 1430 Mission Drive
City/State/Zip: Solvang, California, 93463	Phone: (805) 686-8176
Responsible Specialist: Thomas Rejzek	Title: Professional Geologist

VIII. Additional Comments

In 2007, a Phase 1 environmental assessment was conducted. From February to April of 2008, six (6) soil borings were advanced. Laboratory analytical results indicated maximum TPH as gasoline concentration of 20,700 mg/kg and maximum benzene concentration of 11.7 mg/kg in the vicinity of the former southern dispenser island. Based on these results, a new LUFT case was opened.
In November 2008, an additional assessment was conducted to define the lateral and vertical extents of hydrocarbons. HFA determined that TPH as gasoline, benzene, naphthalene, and VOCs were localized in the immediate vicinity of the former southern dispenser island at depths less than 30 fbg.
Four (4) SVE wells and an SVE system were installed at the site. The system operated from August 2010 to April 2011 and removed a total of 3,482 pounds of hydrocarbons from the subsurface. The results of the confirmation soil borings demonstrated that the SVE system had reduced the VOCs to asymptotic levels and removed over 90 percent of the initial mass of hydrocarbons.

IX. Regional Board Certification

Signature of Executive Officer:	**Date:**

X. Local Agency Representative Data

Name:	Title: Fire Marshal
Signature:	**Date:**

XI. Additional Information (to be attached to this report)

1. Listing of Reports

2. Extent of Soil Contamination

a) Maps and cross sections showing the extent of soil degradation by chemicals of concern in excess of guidelines, before and after remediation.

b) Geologic logs with degraded soils. All soil boring and monitoring wells showing sample points with a list of contaminant concentrations.

c) Summary table of all historic soil sampling results.

3. Extent of Groundwater Contamination

a) Maps and cross sections showing the extent of groundwater degradation in excess of detection limits for chemicals of concern, before and after remediation.

b) Geologic logs, including construction details, for all wells.

c) Representative geologic log identifying all water bodies (e.g. surface, perched and water table).

d) Two intersecting cross-sections of the site.

e) Summary table of all historic ground water analyses (including detection levels) and water levels.

Listing of Reports
for Santa Barbara County Fire Department, LUFT Site #502421
Chevron Former Service Station #9-4268

7952 Hollister Avenue, Goleta, California

I attest, under penalty of perjury, in accordance with Water Code section 13267, the following documents constitute the complete list of documents pertaining to waste discharged, hydrogeology and other information directly relevant to the characterization and cleanup of the waste discharged at the subject site.

2012
2012, Work Plan for Well Abandonment Activities, March 1.

2011
2011a, Fourth Quarter 2010 Remediation System Progress Report, January 7.
2011b, 2010 Annual Report for Authority to Construct #13462, February 11.
2011c, First Quarter 2011 Remediation System Progress Report, April 6.
2011d, Soil Vapor Extraction Rebound Test Results and Work Plan, May 31.
2011e, Second Quarter 2011 Remediation System Progress Report, July 7.
2011f, Verification Soil Sampling Report and Mass Calculation of Residual Hydrocarbons, December 20.
2011g, Annual Report for Permit to Operate #13462, December 21.

2010
2010a, Corrective Action Plan, May 3.
2010b, Third Quarter 2010 Remediation System Progress Report, October 5.
2010c, Emissions Verification Test Report, December 22.

2009
2009a, Site Assessment Report, February 18.
2009b, Corrective Action Plan, July 10.

2008
2008a, Rincon's Additional Soil Assessment, May 14.
2008b, Work Plan for Site Assessment Activities, September 8.

Signature of Responsible Party: _____

Printed name of Responsible Party: _____

Date: _____